

# *2013-2014 Annual Report*

MISSOURI DEPARTMENT OF CONSERVATION





# Annual Report



*Missouri Department of Conservation*  
*Fiscal Year July 1, 2013 to June 30, 2014*





# Contents

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<b>Annual Report Summary</b> .....	2
<b>Missouri State Constitutional Language</b> .....	8
<b>Our Responsibilities</b> .....	10
<b>The Conservation Commission, Director, and Mission Statement</b> .....	12
<b>Conservation at a Glance</b> .....	13
We Listen to Missourians .....	14
What Missourians Say About Conservation .....	15
The Economics of Conservation in Missouri .....	16
Hunting and Fishing .....	17
Forestry and Wood Products .....	18
Wildlife Recreation .....	19
<b>Our Pledge to Serve Missourians</b> .....	20
<b>Bringing the Goals to Life</b> .....	21
Healthy Forest, Fish, and Wildlife .....	21
Manage Lands in Public Trust .....	31
Sound Financial Accountability .....	33
Citizen Involvement/Education .....	34
Engage Partners at all Levels .....	41
<b>Department Organization and Administrative Descriptions</b> .....	48
Department Regions and Units .....	49
Department Organizational Chart .....	50
Director's Office and Department Divisions .....	51
<b>Conservation by the Numbers</b> .....	83
Actual Funds Available and Disbursements .....	84
Number of Deer Harvested by County .....	85
Number of Turkeys Harvested by County .....	86
Acres of Conservation Land by County .....	87
Payment In-lieu of Taxes (PILT) by County .....	88
County Aid Road Trust (CART) Program .....	89
Capital Improvement Projects Funding by County .....	90
Number of Deer and Turkey Permit Holders by County of Residence .....	91
Number of Fishing Permit Holders by County of Residence .....	92
Number of Small Game Permit Holders by County of Residence .....	93
Number of Landowner Deer Permit Holders by County of Residence .....	94
Number of Landowner Turkey Permit Holders by County of Residence .....	95
Number of Hunting Permit Holders by County of Residence .....	96



***Fiscal Year 2013–2014***

# ANNUAL REPORT



This Annual Report summary highlights the Missouri Department of Conservation's accomplishments and expenditures from July 1, 2013, through June 30, 2014. These accomplishments are based on the Department's five main goals. Not only does this summary highlight the accomplishments of the Department, but it emphasizes that Missourians care about conserving forests, fish, and wildlife; that we work with Missourians and for Missourians to sustain healthy forests, fish, and wildlife; that we help people discover nature; that conservation makes Missouri a great place to hunt and fish; and that conservation pays by enriching our economy and quality of life.

## HEALTHY FORESTS, FISH, AND WILDLIFE

### Elk Restoration

The purpose of the Elk Restoration Project was to establish a herd of elk within a pre-determined area of the Ozarks in southeastern Missouri. Relocation began in 2011 and was complete in 2013 with a total of 111 elk from Kentucky released on Peck Ranch Conservation Area. The population is currently estimated at 125 animals, with a long-term goal of 400 to 500. The elk are slowly expanding their range and elk viewing continues to be popular with the public. The Department continues to work with landowners in the Elk Restoration Zone to make habitat improvements that benefit elk and other wildlife.

### Quail Habitat and Population Monitoring

The Department had three important quail monitoring initiatives in fiscal year 2014. In addition, the state quail plan and regional quail plans were updated. This effort was led by the Quail and Small Game Task Force, and it resulted in a plan that will serve as a guiding document to improve habitat for quail and many species of wildlife into the future, on both public and private land.

- **National Quail Monitoring Pilot:** Missouri is one of seven states in the nation piloting a habitat and quail population monitoring system for quail focus areas.
- **Quail Forever Volunteer Monitoring:** In October, the Department partnered with Quail Forever volunteers to survey three additional focus areas around the state: Scott County Quail Focus Area, Stoddard County Quail Focus Area, and Cass County Quail Focus Area.
- **Bee Ridge Focus Area Monitoring:** The Department joined with private landowners and Quail Forever Whistling Bobs chapter members to monitor quail numbers on the Bee Ridge Focus Area in northeast Missouri.

### Feral Hogs

The Department completed the second year of its Five-Year Feral Hog Operational Plan, eradicating 740 feral hogs by regional strike teams. Eleven of these hogs tested positive for hog-related diseases.

### Wildfire Suppression

The Department worked with fire departments across the state to suppress 3,843 wildfires that consumed 40,392 acres and upgraded its network of remote automated weather stations with two satellite capable stations. In addition, six 20-person, interagency fire crews were sent to assist with fire suppression in California, Colorado, Utah, Oregon, and Idaho.



**The Department completed the second year of its Five-Year Feral Hog Operational Plan, eradicating 740 feral hogs by regional strike teams.**

### Stocking Public Waters

- **Urban Fishing:** During 2013, 49 urban lakes were managed for fishing. A total of 118,290 keeper-sized fish were stocked in these lakes; this included 68,041 channel catfish and 50,249 rainbow trout.
- **Cold-Water Fish Hatcheries:** During 2013, cold-water hatcheries stocked 1,501,025 trout. These fish were distributed in four trout parks, 12 stream special management areas, and Lake Taneycomo. There were 302,932 daily adult and 61,277 daily youth tags sold at the trout parks. Anglers purchased 94,063 annual trout fishing permits.
- **Warm-Water Fish Hatcheries:** During 2013, 10.1 million fish were stocked in public waters. Fish stocked include hybrid striped bass, paddlefish, channel catfish, hybrid sunfish, and walleye.

### Hellbender Restoration

The Department's Shepherd of the Hills Hatchery in Branson and the Saint Louis Zoo's Ron Goellner Center for Hellbender Conservation, with support from other agencies and private citizens, continue to work together to keep Missouri's largest salamander from extinction through cutting-edge efforts. Suc-



cessful captive breeding of Ozark hellbenders occurred at the St. Louis Zoo for the third consecutive year, producing over 600 larvae. In addition, the zoo reared approximately 3,500 larvae and juvenile hellbenders. During the summer of 2013, 150 eastern hellbenders raised at the hatchery and 602 Ozark hellbenders raised at the zoo were released in their native Ozark rivers.

#### **Furbearers and Trapping**

During the 2013 fur harvest season, the Department sold more than 10,000 trapping permits, which is a 25-year high. The coyote harvest was the highest in 25 years. Participation by furbearer hunters has been increasing.

## **MANAGE LANDS IN PUBLIC TRUST**

#### **Public Input on Area Plans**

Conservation area management plans document strategies for natural resource management and public use on conservation areas. The Department manages 956 properties (totaling nearly 1 million acres) statewide. In fiscal year 2014, staff drafted 128 plans that cover 239 conservation areas and accesses. For the first time, 47 area plans (covering 109 areas)

**The skills session of the new Hunter Education program launched this year provides hands-on application of safe hunting practices.**

were posted for public comment. Over 500 public comments were collected. Public review of area plans offers an important opportunity for Missourians to comment about the management of a specific conservation area.

#### **Land Management**

The Department maintained active management on Department lands for all wildlife and their habitats. This year, staff conducted habitat management on nearly 200,000 acres of public land. In addition, forest and woodland habitat improvements were conducted on 53,660 acres of state land.

#### **State Forest Nursery**

The State forest nursery annually grows and distributes close to 3 million seedling trees of more than 60 species. The seedlings include trees and shrubs suitable for reforestation and wildlife-habitat restoration. The seedlings are planted on both public and private lands statewide. The nursery filled more than 9,300 orders involving more than 20,000 packages of seedlings, with a customer satisfaction rate of more than 99 percent.

## **SOUND FINANCIAL ACCOUNTABILITY**

#### **Conservation Goals and Priorities**

The Department developed goals and conservation priorities for fiscal year 2014 to serve as an annual strategic plan. The conservation priorities address the most important conserva-



## RECEIPTS

Conservation Sales Tax .....	\$107,076,440
Permit Sales .....	\$33,044,656
Federal Reimbursements .....	\$27,945,766
Sales and Rentals .....	\$10,283,532
Other Sources .....	\$2,803,488
Interest .....	\$384,769
<b>Total Receipts .....</b>	<b>\$181,538,651</b>

## DISBURSEMENTS

County Assistance Payments .....	0.97%
Capital Improvements .....	8.38%
Information Technology .....	7.30%
Fisheries .....	8.20%
Forestry .....	10.80%
Wildlife .....	12.22%
Outreach and Education .....	9.77%
Private Land Services .....	5.22%
Protection .....	9.73%
Resource Science .....	6.99%
Regional Public Contact Offices .....	1.30%
Administrative Services .....	7.63%
Human Resources .....	1.46%
Design and Development .....	8.39%
Administration .....	1.64%

## MISSOURI STATE BUDGET

Health and Social Services .....	45.4%
Education .....	27.1%
Government Services .....	15.3%
Transportation .....	8.6%
Natural and Economic Resources .....	3.0%
Conservation .....	0.6%
<b>MDC represents less than 1% of the total state budget</b>	
<b>Total State Budget .....</b>	<b>\$24,800,701,641</b>

tion challenges within the next three years. A brochure was prepared about the Department's mission, vision, goals, and priorities.

### Internships Encourage Diversity

The Department began its 11th year of an internship program. Objectives are threefold: expose students to a variety of professional tasks and the Department's culture, mentor promising students in disciplines in which job candidates are scarce, and attract students with diverse cultural backgrounds to contribute to the Department's workforce. In fiscal year 2014, students from four colleges and universities interned.

## CITIZEN INVOLVEMENT/EDUCATION

### Hunter Education

A new Hunter Education program was launched this year. The two-session format includes knowledge and skills components. The knowledge session can be completed online, by self-study, or in a classroom. The skills session is taught by certified instructors and provides hands-on application of safe hunting practices.

### Citizen Input on White-tailed Deer

Eight "Protecting Missouri's White-tailed Deer" public meetings occurred in fall 2013. A total of 695 people attended these public meetings, and the Department collected nearly 1,500 comments via comment cards and online. Deer Management Open Houses were conducted during summer 2014 to gather public input regarding possible white-tailed deer regulation changes such as season timing, bag limits, and archery methods. Nine of the 14 open houses were conducted during fiscal year 2014, reaching 841 people interested in deer management. There was also a virtual open house on the Department website providing the same information and opportunities to comment.

## FISCAL YEAR 2014 SUMMARY

### County Assistance Payments—\$1,689,160

Paid county levee and drainage district taxes, forest cropland payments, in lieu of real estate taxes, and county aid road trust payments. Since 1980, paid more than \$19 million to Missouri counties in lieu of real estate taxes.

### Capital Improvements—\$14,638,655

Constructed, renovated, and repaired fish hatcheries, river accesses, wetlands, shooting ranges, nature centers, and facilities statewide; and acquired land.

### Information Technology—\$12,743,449

Includes information management and technology that supported all computers, software, telephones, and other telecommunications systems.

**Fisheries—\$14,319,678** Managed sport fish populations, aquatic biodiversity, and aquatic habitats. Managed 1,025 areas for fishing, and assisted 5,556 landowners with stream and lake management. Stocked about 11.8 million fish in public waters.

**Forestry—\$18,854,335** Distributed about 3 million seedlings to 9,300 landowners, provided forestry assistance on more than 114,485 acres of private land and to more than 159 municipalities, managed 438,700 acres of public forest, monitored insect and disease threats, and facilitated development of the state's forest industry.

**Wildlife—\$21,345,613** Managed more than 163,000 acres of public land. Monitored federally endangered or threatened species. Identified priority geographies to focus investments. Aided guidance and funding for national and international bird conservation. Facilitated about 43,000 hunter trips through managed hunts.

(continued on Page 6)



# FISCAL YEAR 2014 SUMMARY

(continued from Page 5)

## **Outreach and Education—\$17,058,239**

About a million people visited nature, education, and visitor centers, and about 170,000 used staffed shooting ranges. More than 550,000 subscribed to the *Missouri Conservationist*, more than 175,000 subscribed to *Xplor*, and there were about 7 million visits to MDC's public websites by more than 4.2 million users. Also provided more than \$250,000 in grants to schools and conservation curriculums for schools.

## **Private Land Services—\$9,111,375**

Provided 32,437 rural and urban landowner contacts, affected 244,600 acres through technical assistance to landowners, provided habitat management workshops to 31,946, assisted USDA with enrolling 1,685 contracts affecting 149,195 acres through the Wetland Reserve Program (WRP), and paid out \$1.71 to Missouri landowners in cost-share and incentives through the Department's Landowner Assistance Program.

**Protection—\$16,991,966** Provided wildlife law enforcement in every county as well as resource management, information, education, and public service. Conservation agents contacted approximately 657,000 people, and they coordinated the Share the Harvest program. Conservation agents, along with 998 volunteers donating more than 12,000 hours, conducted more than 1,100 hunter education classes, certifying more than 20,000 students.

**Resource Science—\$12,204,839** Monitored the status of Missouri's fish, forests, plants, and wildlife, recommended conservation actions, evaluated these actions, and reported the results. Tens of thousands of Missourians were contacted to determine their outdoor activities and opinions about conservation programs.

**Regional Public Contact Offices—\$2,274,989** Provided regional offices to directly serve Missourians.

## **Administrative Services—\$13,326,710**

Paid for hunting and fishing permit sale systems, fiscal services, purchasing, distribution center, and sign shop. Provided agency-wide postage and printing services, fleet management, vehicle and equipment maintenance, and other agency appropriations.

## **Human Resources—\$2,559,491**

Provided the services to recruit, employ, and train employees.

## **Design and Development—\$14,644,427**

Provided engineering, architectural design, cultural resource review, surveying, and construction, as well as maintenance of conservation areas and facilities.

**Administration—\$2,867,828** Provided audits, legal counsel, strategic planning coordination, federal reimbursement administration, environmental policy development, public involvement, and river basin management.

## **Social Media**

The Department's Facebook page has more than 117,000 likes and reaches almost 75,000 people per week who share our information with more than 5.5 million friends. Our Twitter feed has more than 5,000 followers who then pass our tweets along to thousands more. The Department's YouTube channels contain more than 1,000 videos and average about 100,000 views per month with more than 8.5 million total views. Department online photos through Flickr offer over 1,000 images with more than 2,500 reader photos, which have had more than 295,000 lifetime views. The Department has also recently delved into the world of Google+ Hangouts, providing a new way to reach a more diverse audience.

## **Habitat-Management Workshops**

The Department held or participated in more than 543 habitat management workshops and field days for more than 32,000 private landowners. The workshops focused on management techniques to benefit early successional wildlife such as quail, rabbits, and grassland birds.

## **Private Lake and Stream Management**

Fisheries staff responded to 4,795 requests for watershed, floodplain, riparian corridor, stream, or lake management information and/or technical assistance. Six hundred and fifty-five on-site visits were made and 106 recommendations or management plans were written. On-site work included 137 fish-population surveys, 17 renovations, and 51 fish-kill investigations. Staff conducted 19 stream or lake management workshops for 835 people. Staff also coordinated or participated in 14 active watershed-management projects.

## **Forest Management for Landowners**

The Department provided forest management on-site technical assistance to 1,715 landowners throughout the state, impacting 114,485 acres. Many of these on-site visits resulted in a written management plan. A total of 300 plans covering 27,828 acres were written. In addition, 77 private land timber sales were marked and 232 landowners were referred to a forest consultant.

## **Landowner-Led Conservation Habitat Cooperatives**

The Department and nongovernment organizations provided 45 wildlife and habitat cooperatives with information through workshops and educational meetings in fiscal year 2014.

## **Listened to Missourians**

Part of delivering excellent public service is to listen to and understand Missourians. In fiscal year 2014, there were 124 activities that involved 86,427 people. These included surveys, focus groups, open houses, comment periods, com-



ments to the Regulations Committee, and contacts with the Department's ombudsman.

## ENGAGE PARTNERS AT ALL LEVELS

### Monitoring Forest Health

The Forest Health Program is an effort among the Department and other state and federal agencies to monitor and evaluate forest health and provide information to Missourians. In fiscal year 2014, staff responded to 3,043 requests for assistance with forest health issues and worked with state and federal partners to develop the Missouri Invasive Forest Pest Plan, which outlines combined state and federal responses to invasive forest insects and diseases in Missouri.

### Volunteer Fire Departments

The Department, in cooperation with the U. S. Forest Service, provided \$386,938 in grants to 183 volunteer fire departments. Equipment was also provided to fire departments through two federal programs. Through the Federal Excess Property Program, we obtained equipment valued at \$16,251. Through the Fire Fighter Program, we obtained equipment valued at \$3,337,661.

**The Missouri National Archery in the Schools program promotes education, self-esteem, and physical activity through the sport of archery to more than 125,000 Missouri students.**

### Share the Harvest

Conservation agents coordinate and support the Share the Harvest program with the Conservation Federation of Missouri, local charitable organizations, and local meat processors. In 2013, approximately 4,489 hunters donated 227,358 pounds of venison to less-fortunate Missourians.

### Archery in the Schools

Missouri National Archery in the Schools (MoNASP) is coordinated through the Department and the Conservation Federation of Missouri. MoNASP is an affiliate of the National Archery in the Schools Program and promotes education, self-esteem, and physical activity through the sport of archery to more than 125,000 Missouri students. In the first seven months of the year, 123 schools were added. The sixth annual MoNASP state tournament, held March 2014, drew 1,344 student archers and more than 7,500 observers and supporters. ▲

# Missouri State Constitutional Language

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**Section 40(a). Conservation commission, members, qualifications, terms, how appointed-duties of commission-expenses of members.** — The control, management, restoration, conservation and regulation of the bird, fish, game, forestry and all wildlife resources of the state, including hatcheries, sanctuaries, refuges, reservations and all other property owned, acquired or used for such purposes and the acquisition and establishment thereof, and the administration of all laws pertaining thereto, shall be vested in a conservation commission consisting of four members appointed by the governor, by and with the advice of and consent of the senate, not more than two of whom shall be of the same political party. The members shall have knowledge of and interest in wildlife conservation. The members shall hold office for terms of six years beginning on the first day of July of consecutive odd years. Two of the terms shall be concurrent; one shall begin two years before and one two years after the concurrent terms. If the governor fails to fill a vacancy within thirty days, the remaining members shall fill the vacancy for the unexpired term. The members shall receive no salary or other compensation for their services as members, but shall receive their necessary traveling and other expenses incurred while actually engaged in the discharge of their official duties.

Source: Const. of 1875, Art. XIV, Sec. 16 (as adopted November 3, 1936). (Amended August 8, 1972)

**Section 40(b). Incumbent members.** — The members of the present conservation commission shall serve out the terms for which they were appointed, with all their powers and duties.

**Section 41. Acquisition of property-eminant domain.** — The commission may acquire by purchase, gift, eminent domain, or otherwise, all property necessary, useful or convenient for its purposes, and shall exercise the right of eminent domain as provided by law for the highway commission.

Source: Const. of 1875, Art. XIV, Sec. 16.

**Section 42. Director of conservation and personnel of commission.** — The commission shall appoint a director of conservation who, with its approval, shall appoint the assistants and other employees deemed necessary by the commission. The commission shall fix the qualifications and salaries of the director and all appointees and employees, and none of its members shall be an appointee or employee.

Source: Const. of 1875, Art. XIV, Sec. 16.

**Section 43(a). Sales tax, use for conservation purposes.** — For the purpose of providing additional moneys to be expended and used by the conservation commission, department of conservation, for the control, management, restoration, conservation and regulation of the bird, fish, game, forestry and wildlife resources of the state, including the purchase or other acquisition of property for said purposes, and for the administration of the laws pertaining thereto, an additional sales tax of one-eighth of one percent is hereby levied and imposed upon all sellers for the privilege of selling tangible personal property or rendering taxable services at retail in this state upon the sales and services which now are or hereafter are listed and set forth in, and, except as to the amount of tax, subject to the provisions of and to be collected as provided in the “Sales Tax Law” and subject to the rules and regulations promulgated in connection therewith; and an additional use tax of one-eighth of one percent is levied and imposed for the privilege of storing, using or consuming within this state any article of tangible personal property as set forth and provided in the “Compensating Use Tax Law” and, except as to the amount of the tax, subject to the provisions of and to be collected as provided in the “Compensating Use Tax Law” and subject to the rules and regulations promulgated in connection therewith.

(Adopted November 2, 1976)

**Section 43(b). Use of revenue and funds of conservation commission.** — The moneys arising from the additional sales and use taxes provided for in section 43(a) hereof and all fees, moneys or funds arising from the operation and transactions of the conservation commission, department of conservation, and from the application and the administration of the laws and regulations pertaining to the bird, fish, game, forestry and wildlife resources of the state and from the sale of property used for said purposes, shall be expended and used by the conservation commission, department of conservation, for the control, management, restoration, conservation and regulation of bird, fish, game, forestry and wildlife resources of the state, including the purchase or other acquisition of property for said purposes, and for the administration of the laws pertaining thereto, and for no other purpose. The moneys and funds of the conservation commission arising from the additional sales and use taxes provided for in § 43(a) hereof shall also be used by the conservation commission, department of conservation, to make payments to counties for the unimproved value of land for distribution to the appropriate political subdivisions as payment in lieu of real property taxes for privately owned land acquired by the commission after July 1, 1977, and for land classified as forest cropland in the forest cropland program administered by the department of conservation in such amounts as may be determined by the conservation commission, but in no event shall amount determined be less than the property tax being paid at the time of purchase of acquired lands.

Source: Const. of 1875, Art. XIV, Sec. 16. (Amended November 2, 1976) (Amended November 4, 1980)

**Section 43(c). Effective date-self-enforceability.** — The effective date of this amendment shall be July 1, 1977. All laws inconsistent with this amendment shall no longer remain in full force and effect after July 1, 1977. All of the provisions of sections 43(a)–(c) shall be self-enforcing except that the general assembly shall adjust brackets for the collection of the sales and use taxes.

(Adopted November 2, 1976)

**Section 44. Self-enforceability-enabling clause-repealing clause.** — Sections 40–43, inclusive, of this article shall be self-enforcing, and laws not inconsistent therewith may be enacted in aid thereof. All existing laws inconsistent with this article shall no longer remain in force or effect.

Source: Const. of 1875, Art. XIV, Sec. 16

**Section 45. Rules and regulations-filing-review.** — The rules and regulations of the commission not relating to its organization and internal management shall become effective not less than ten days after being filed with the secretary of state as provided in section 16 of this article, and such final rules and regulations affecting private rights as are judicial or quasi-judicial in nature shall be subject to the judicial review provided in section 22 of article V.

**Section 46. Distribution of rules and regulations.** — The commission shall supply to all persons on request, printed copies of its rules and regulations not relating to organization or internal management.

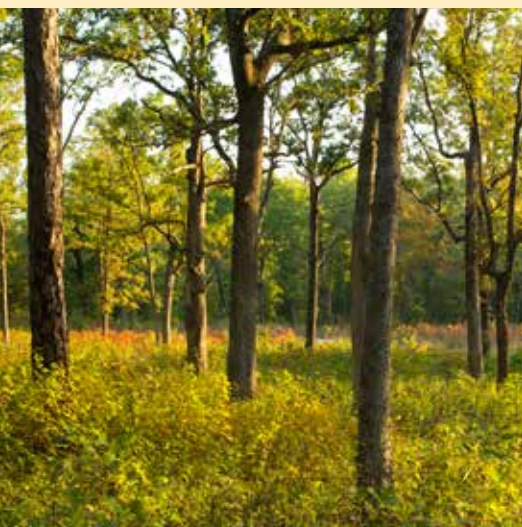




## Our Responsibilities

### 1 Manage Missouri's Forests, Fish, and Wildlife

- We work for and with Missourians to sustain healthy forests, fish, and wildlife.
- Conservation successes are many and include forests, streams, white-tailed deer, turkey, fish, and other plants and animals.
- We enforce the *Wildlife Code of Missouri* to provide current outdoor opportunities and to ensure future generations will have those same opportunities to hunt, fish, and enjoy the outdoors.
- Research and citizen input informs decisions on the future of Missouri's forest, fish, and wildlife resources.



### Our Forests, Fish, and Wildlife

- Conservation is a partnership. Missouri has more than 44 million acres, over 90 percent are privately owned.
- There are nearly 1,000 conservation areas that provide close-to-home outdoor opportunities on nearly one million acres.
- Healthy forests, fish, and wildlife enrich our economy and the quality of life for all Missouri citizens.





## 2 Educate Missourians

- We help educate Missourians as they discover nature and improve their outdoor skills.
- Missouri has a rich conservation heritage of a quality outdoors that is being passed along to the next generation through free school materials.
- Hunter education, archery, fishing, shooting skills, and nature-viewing classes empower citizens to enjoy the outdoors.
- Citizens learn about the outdoors through an award-winning *Missouri Conservationist* magazine and children's *Xplor* magazine, along with Web, video, and print information.

## 3 Help People Be Outdoors

- We provide close-to-home outdoor opportunities in urban, suburban, and rural areas throughout the state at conservation areas, boat ramps, public lakes, nature centers, interpretive centers, shooting ranges, and fish hatcheries.
- We partner with tens of thousands of landowners to help restore, improve, and sustain Missouri forests, waters, and wildlife habitats.



## Conservation Pays Its Way

- Conservation generates \$12 billion dollars each year in economic impact and continues to be a wise investment.
- One of every four tourism dollars in Missouri is spent on fish and wildlife recreation.
- 89,000 Missouri jobs are supported by fish and wildlife recreation and the forest products industry.

# The Conservation Commission and Director

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In 1936, the people of Missouri, through the initiative petition process, voted to amend the Missouri Constitution to establish the Conservation Commission. The four Commissioners, no more than two of whom may belong to the same political party, are appointed by the governor with the advice and consent of the senate. They serve with no compensation for six-year terms. The commission is responsible for management of the state's forest, fish, and wildlife resources. The commission is also responsible for hiring the director.



**Mr. Don C. Bedell**  
Sikeston  
**Term:** 7/30/2009 to  
7/1/2015



**Mr. James T. Blair, IV**  
St. Louis  
**Term:** 7/13/2011 to  
6/30/2017



**Mrs. Marilyn J. Bradford**  
Jefferson City  
**Term:** 10/25/2013 to  
6/30/2019



**Mr. David W. Murphy**  
Columbia  
**Term:** 6/4/2014 to  
6/30/2019

## **Director**



**Mr. Robert L. Ziehmer**

## **Our Mission**

*To protect and manage the forest, fish, and wildlife resources of the state; to facilitate and provide opportunity for all citizens to use, enjoy, and learn about these resources.*

# Conservation at a Glance

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- ▲ We Listen to Missourians
- ▲ What Missourians Say About Conservation
- ▲ The Economics of Conservation in Missouri
- ▲ Wildlife Recreation
- ▲ Hunting and Fishing
- ▲ Forestry and Wood Products



## We Listen to Missourians

**T**he Missouri Department of Conservation believes that all Missouri citizens are important and we want to listen and act to earn their trust. Our job is to listen, understand, and personally deliver programs and services in a manner that benefits all Missourians and the forest, fish, and wildlife resources in Missouri.



- The Conservation Commission meets regularly and anyone may contact the Conservation Commission with comments or request to appear at a Commission meeting.
- The Conservation Department director may be personally contacted at Department headquarters in Jefferson City by telephone.
- The Department ombudsman works with citizens to resolve conflicts and answers a wide variety of questions by mail, Facebook, telephone, and email (ombudsman@mdc.mo.gov).
- The Department conducts a wide variety of statistically accountable mail surveys, telephone surveys, and focus groups to determine the opinions and attitudes of Missourians about conservation and the Department of Conservation. The Department has conducted attitude, opinion, satisfaction, and participations surveys for more than 30 years.
- The Department has eight regional service centers with staff available to assist Missourians with their conservation requests and needs.
- The Department's monthly magazine, free to Missourians who request it, includes a letter-to-the-editor section and an "Ask the Ombudsman" column.
- The Department maintains an extensive website (mdc.mo.gov) with conservation information, contact information, and online comment forms.
- The Department conducts frequent public forums to obtain interactive feedback from all Missourians at locations throughout the state.
- Department regulations are formed and discussed in a public setting that invites citizen participation.
- The Department seeks public input on proposed regulations through a variety of venues including the Department's regulation comment page at [mdc.mo.gov/node/24137](http://mdc.mo.gov/node/24137).
- The Department seeks public input on conservation area management plans at [mdc.mo.gov/areaplans](http://mdc.mo.gov/areaplans).

# What Missourians say about Conservation

**T**he majority of Missourians feel the Department of Conservation is doing an excellent or good job of providing services to themselves (67 percent), their families (65 percent), the community (64 percent), and the state (68 percent). Most Missourians say they are either very familiar (21 percent) or somewhat familiar (62 percent) with the Missouri Department of Conservation.



- Most Missourians (95 percent) report they are interested in Missouri's fish, forests, and wildlife.
- Most Missourians (71 percent) agree that land should be acquired for fish, forest, and wildlife conservation.
- Most Missourians (89 percent) agree that "It is important for outdoor places to be protected even if you don't plan to visit the area."
- Most Missourians (76 percent) agree that the Department of Conservation should make an effort to restore animals that once lived or are currently very rare in the state.
- Most Missourians (77 percent) agree that the Department of Conservation should help private landowners who want to restore native communities of plants and animals.
- More than three-quarters (77 percent) agree that the Department "should assist communities that want to include trees and green spaces in housing, business, and shopping developments."
- Most Missourians (84 percent) approve of hunting for food, yet only 28 percent approve of hunting for an exceptional animal.
- Most Missourians (88 percent) approve of cutting down trees to improve forest health and condition, yet only 43 percent approve of cutting down trees to make lumber, furniture, or other wood products.
- The majority of Missourians (52 percent) agree that trapping is okay as long as it is regulated.
- Time is mentioned as the biggest obstacle to the enjoyment of outdoor activities by Missourians.
- A majority of Missourians (65 percent) agree that the Department of Conservation is doing a good job of enforcing fish and wildlife laws.
- Most Missourians (76 percent) agree that the Missouri Department of Conservation "is a name I can trust."

Information from the Missouri Department of Conservation, 2013.



# The Economics of Conservation in Missouri

**T**he amount of state sales tax revenue generated from forest, fish, and wildlife recreation spending is about the same amount of sales tax revenue received by the Department of Conservation from the one-eighth of one percent Conservation Sales Tax — **CONSERVATION PAYS ITS WAY IN MISSOURI.**



- In Missouri, the total economic impact of fish and wildlife recreation and the forest products industry is more than \$12 billion dollars annually.
- Since 1980, the Department has paid over \$19 million dollars to Missouri counties in lieu of taxes. In fiscal year 2014, more than \$1.6 million was paid to Missouri counties for forest cropland payments, levee and drainage district payments, in-lieu-of-property-tax payments, and county aid road trust payments.
- The forestry and wood products industry in Missouri has more than \$8 billion dollars of impact and supports 42,538 jobs.
- Missourians and non-residents spend more than \$2.6 billion dollars annually related to fish and wildlife recreation. These expenditures generate \$4.7 billion dollars annually in economic impacts in Missouri.
- The annual expenditures related to fish and wildlife recreation support 56,910 jobs in Missouri.
- Forest, fish, and wildlife expenditures generate more than \$507 million dollars annually in state and local tax revenue.
- In Missouri, 2.5 million residents and nonresidents, age 16 years and older, participate in fishing, hunting, or wildlife-related recreation each year.
- Collectively, resident anglers spend 13.3 million days afield, resident hunters 9.2 million, and resident wildlife-watchers 7.8 million days in away-from-home activities, in Missouri. Nonresident anglers add 1.6 million days and nonresident hunters 932,000 days.
- Nonresident expenditures for fishing and hunting in Missouri exceed \$346 million each year. Each nonresident angler and hunter spends an average of \$547 dollars each year in Missouri.
- Deer hunters in Missouri, age 16 years and older, spend \$615 million each year.
- Deer hunting in Missouri generates more than \$1 billion dollars of business activity annually. This results in \$95 million in state and local tax revenue each year.
- Deer hunting expenditures annually support more than 13,000 jobs in Missouri.

Information from the Missouri Department of Conservation and the 2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation.

# Missouri Hunting and Fishing

Hunters	576,000
Anglers	1 million
Total Expenditures	\$1.7 billion
Total Jobs Supported	38,185
Earnings from Expenditures	\$1.2 billion
State and Local Tax Revenue	\$274 million
Total Business-Generated Revenue	\$3 billion



## STATE TAX REVENUE INFORMATION

Hunters and anglers in Missouri generate \$274 million annually in state and local taxes.

## JOBS

Hunters and anglers support 45,939 jobs each year.

## TAKE A CLOSER LOOK

- More Missourians hunt or fish than the number who attend St. Louis Rams or Kansas City Chiefs games.
- One of every four Missouri residents hunts or fishes.
- Annual spending by hunters and anglers is more than the value of sales for cattle production in Missouri.

- The amount of sales tax revenue generated by forest, fish, and wildlife recreation is more than the amount of sales tax received by the Department of Conservation from the one-eighth of one percent sales tax — in other words, conservation pays its way in Missouri.

Information from the Missouri Department of Conservation and the U.S. Fish and Wildlife Service 2011 National Survey of Fishing, Hunting and Wildlife-Associated Recreation.

# Missouri Forestry and Wood Products

Total Forested Acres	14 million
Privately Owned Acres	83 percent
Publicly Owned Acres	15 percent
Wood-Using Industry Dollars	\$8 billion
Total Jobs Supported	42,538
Wood-Using Industry Labor Income	\$1.9 billion



## STATE TAX REVENUE INFORMATION

Forestry and the wood-using industries in Missouri generate \$78 million each year in state sales tax.

## TAKE A CLOSER LOOK

- Each year, about three million tree seedlings are produced in the state nursery.
- More than one million acres of forests have been added to Missouri's landscape in the last 30 years.
- Forests in Missouri are increasing faster than they are being harvested.
- Most of the forests in Missouri are privately owned.

## JOBS

Wood industry firms and activities support more than 42,000 jobs each year.

- Forests are important to Missourians who enjoy outdoor recreation such as camping, sightseeing, bird watching, canoeing, photographing nature, hunting, or fishing. Many Department of Conservation areas have campsites or are open for primitive camping.
- Forests in Missouri are essential for healthy streams, clean water, wildlife habitat, and environmental stability.

Information from the Missouri Department of Conservation.

## CONSERVATION PAYS ITS WAY IN MISSOURI

# Missouri Wildlife Recreation

Wildlife Watchers	1.7 million
Total Expenditures	\$940 million
Total Jobs Supported	18,725
Earnings from Expenditures	\$692 million
State and Local Tax Revenue	153 million
Total Business-Generated Revenue	\$1.7 billion



## STATE TAX REVENUE INFORMATION

Wildlife watchers in Missouri generate \$153 million annually in state and local taxes.

## JOBS

Wildlife watching activities in Missouri support 18,725 jobs each year.

## TAKE A CLOSER LOOK

- In Missouri, adults involved in wildlife watching would fill Arrowhead Stadium in Kansas City more than 22 times.
- Missourians are outdoor oriented — each year they spend 7.8 million days in wildlife watching activities away from their home. More than 1.5 million enjoy observing, feeding, and photographing wildlife near their homes.
- The amount of sales tax revenue generated by forest, fish, and wildlife recreation is more than the amount of sales tax received by the Department of Conservation from the one-eighth of one percent sales tax — in other words, conservation pays its way in Missouri.

Information from the Missouri Department of Conservation and the U.S. Fish and Wildlife Service 2011 National Survey of Fishing, Hunting and Wildlife-Associated Recreation.



# Our Pledge to Serve Missourians

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**T**he Missouri Department of Conservation's mission, vision, goals, and values communicate our never-ending pledge to serve Missourians and to meet the requirements of the Missouri Constitution (Article IV, Section 40(a) through 46).

## Mission

To protect and manage the fish, forest, and wildlife resources of the state; to facilitate and provide opportunity for all citizens to use, enjoy, and learn about these resources.

## Vision

The Department shall be a forward looking agency, implementing solid core values ensuring integrity and trust, using adaptive learning and creative thinking, embracing technology and providing superior public service — to be the national leader in forest, fish, and wildlife management proactively advancing our mission through understanding natural resource and social landscapes.

## Goals

- ▲ Ensure healthy and sustainable forest, fish, and wildlife resources throughout the state.
- ▲ Manage lands held in public trust and associated infrastructure to ensure continued benefit to citizens and to forest, fish, and wildlife resources.
- ▲ Ensure sound financial accountability and transparency in all areas of operation.
- ▲ Provide opportunities for active citizen involvement in services and conservation education in both rural and urban areas.
- ▲ Engage partners at all levels (individual, community, county, state, federal) to enhance natural resources and effective delivery of conservation services.

## Priority/Focus Within All Operational Areas

- ▲ Increase communication and education within and outside the agency
- ▲ Boldly advance research and management
- ▲ Increase citizen involvement and partnerships
- ▲ Grow quality staff

## Values/Behaviors of Employees

- ▲ Excellent public service is essential — we work to deliver more than is expected.
- ▲ All citizens are important — we treat citizens the way we would want to be treated.
- ▲ Missourians are partners to achieve conservation success — we communicate openly and look for ways to make it easier to partner.
- ▲ Fairness, objectivity, sound science, integrity, and accountability guide actions — we know conservation best, value each other's time, strive to work at the speed of business not the speed of government, and are transparent.
- ▲ Employees are the Department's most important asset — we all work to advance conservation by being results driven, working as a team, serving as ambassadors for conservation, and living out the conservation ethic through our actions.



# Bringing the Goals to Life

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## Healthy Forests, Fish, and Wildlife

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### Quail Habitat and Population Monitoring

The Department had three important quail monitoring initiatives in fiscal year 2014. Along with these initiatives the state quail plan was updated in FY14. This effort was led by the Quail and Small Game Task Force, a group primarily comprised of Department staff, but also including Natural Resources Conservation Service, National Wild Turkey Federation, Quail Forever, Quail and Upland Wildlife Federation, University of Missouri, and American Bird Conservancy, and it resulted in a plan that will serve as a guiding document to improve habitat for quail and many species of wildlife into the future, on both public and private land. As part of this revision, regional quail plans were also revised.

- **National Quail Monitoring Pilot:** Missouri is one of seven states in the nation piloting a habitat and quail population monitoring system for quail focus areas. This national pilot project is coordinated through the National Bobwhite Conservation Initiative. These seven states are testing a combination of bird and habitat monitoring that will eventually be used by the 25 states with bobwhite quail. These surveys are taking place in designated quail focus areas where agencies and partners are focusing efforts to restore quail habitat. Focus areas include public and private land. In Missouri's case, 5,200 acres of private land in northwest Missouri were chosen where quail habitat management has been intensified through incentives and assistance to landowners by Missouri Department of Conservation staff and Quail Forever volunteers since 2005.

Habitat management for quail has taken off in this focus area through efforts by Department staff and Quail Forever volunteers since 2005. In the focus area, landowners have completed 24 miles of edge spraying. There are 1,591 total acres of CRP in the area with 770 of those acres in warm-season grasses. Food plots are planted on 5–10 percent of the area annually, and 30–40 percent of the CRP plantings have mid-contract management practices applied each year.

During the spring of 2014, 426 bobwhites were heard in the focus area compared to only 78 in the control area. Surveys continue to show that habitat

management for bobwhite benefits other grassland bird species, including dickcissels, meadowlarks, and field sparrows. All birds surveyed increased in 2014 in the focus area as compared to 2013. In contrast, all birds in the control area showed a decline since 2013's initial survey.

- **Quail Forever Volunteer Monitoring:** In October, the Department partnered with Quail Forever volunteers to survey three additional focus areas around the state.

In the Scott County Quail Focus Area (QFA) there were enough habitat improvements through USDA and Department programs that even the geography chosen for a control had numerous native grass field borders. Yet the numbers within the managed focus area were still 30-percent higher than the control.

The Stoddard County Quail Focus Area saw a 31-percent increase in quail numbers over last year and no birds were found on farms that had been mowed late in the summer.

The Cass County Quail Focus Area was surveyed for the first time and had an average of two more coveys for each of the four survey points in the QFA than in the unmanaged area.

- **Bee Ridge Focus Area Monitoring:** The Missouri Department of Conservation has joined with private landowners and Quail Forever Whistling Bobs chapter members to monitor quail numbers on the Bee Ridge Focus Area in northeast Missouri. Together, we have been monitoring quail numbers inside the focus area and outside the focus area since 2008. We consistently observe bobwhite numbers that are higher inside the focus area where landowners have been improving bobwhite habitat compared to the areas outside the focus area that are not managed. The landowners in the 12,000-acre area have established nearly 27 miles of 60-foot-wide quail friendly buffers.

### Small Game Management

The Department continued its efforts to increase hunter recruitment. These efforts include increased focus on the management and hunting of small game. Many small game species are abundant and provide ample opportunity for young, old, new, and seasoned hunters alike. Some species have declined over time and today are pursued by fewer hunters. As part of our effort to increase small game hunting, the Department has formed a Quail and Small Game Task Force, a group primarily comprised of Depart-

ment staff, but also including Natural Resources Conservation Service, National Wild Turkey Federation, Quail Forever, Quail and Upland Wildlife Federation, University of Missouri, and American Bird Conservancy, charged with identifying and implementing approaches to boost hunter participation. Examples of projects being undertaken by the task force include targeted marketing strategies to increase interest in small game hunting; collaboration with other agencies and NGO partners to promote high-quality habitat management; assessments of small game research needs; and the creation, promotion, and support of areas where management efforts might have the most impact. The state's quail plan was also revised. *Strategic Guidance for Northern Bobwhite Recovery 2014–2024* connected the agency's best quail managers to discuss, plan, review, and refine steps the Department should take to ensure an enduring small game legacy in Missouri's countryside.

## **Feral Hogs**

Missouri has a history of free-ranging hogs related to agriculture practices, but current populations are likely the result of illegal releases. Strong relationships with landowners and partners have allowed us to work on 64,000 acres for feral hog eradication efforts. This year, the Department has committed to strengthening our partnership with the U.S. Department of Agriculture Animal and Plant Health Inspection Service by dedicating more time and resources to the eradication of feral hogs on Missouri's landscape. Today, nearly 25 percent of Missouri counties have feral hogs, with the majority residing in the southern portion of the state. The Department has completed the second year of its Five-Year Feral Hog Operational Plan, eradicating 740 feral hogs by regional strike teams. Eleven of these hogs tested positive for hog-related diseases. Regional strike teams include over 130 Department staff members from eight divisions. Strike teams employ the use of trapping, drop nets, shooting, dogs, and aerial gunning.

## **Habitat Beyond Our Borders**

Missouri has been a partner in the Southern Wings Program of the Association of Fish and Wildlife Agencies since 2009. The program connected 28 states and District of Columbia members who work on bird conservation projects with 10 highly successful conservation organizations in Mexico, Central America, South America, and the Caribbean. In

May, the Guatemalan National Congress declared 46,950 acres of a mountainous region on the Caribbean slope as a new national protected area. Since 2012, state fish and wildlife agencies of Tennessee, Arkansas, Iowa, and Texas have been in partnership with the Department to secure this land to support migrant birds that overwinter or stop there during migration to refuel in this region.

Since 1980, the Department has supported Ducks Unlimited waterfowl conservation projects on the Canadian prairies in Manitoba on the vast marshes where many of Missouri's migrating waterfowl nest and millions of ducks are raised. Ducks Unlimited conservation efforts include: habitat retention and protection, restoration and research on wetland loss; nutrient loading, flood prediction, and carbon sequestration. Habitat loss, nutrient loading, and carbon can negatively affect waterfowl survival and reduce the annual recruitment to migratory waterfowl that Missouri stewardship and management target during migration. Over the past 34 years, the Department has contributed more than \$5.9 million to this effort.

In March, the Department and the Canadian Wildlife Service supported the first ever conservation assessment of Central American birds. A week-long meeting was coordinated by the Rocky Mountain Bird Observatory and was held at Las Cruces Biological Station in Costa Rica. All seven Central American countries were represented and trainers in the assessment process came from Mexico and the United States. Approximately 500 species were assessed that had not previously been part of the North American assessment. A series of working sessions will result in a publication with details about the birds' population trends, threats, distributions, and population statuses.

## **Topeka Shiner Restoration**

The Topeka shiner is a small minnow that lives in small- to mid-size prairie streams in the central United States, where it is usually found in pool and run areas. Populations of the Topeka shiner have steadily declined. The species now occupies only about 19 percent of its historical habitat and only 15 percent of its former range in Missouri. The Topeka shiner was designated a federally endangered species in 1998.

Three thousand hatchery-reared Topeka shiners were reintroduced into a creek and ponds on Dunn Ranch and Pawnee Prairie Natural Area through a partnership with the U.S. Fish and Wildlife Service

and The Nature Conservancy. The pond-released fish will reproduce. Some will wash out into adjacent streams, further assisting the restoration effort. Topeka shiners must lay their eggs in active sunfish nests. Orangespotted sunfish were also stocked in the otherwise fishless ponds receiving Topeka shiners. An extended enhancement effort on private and public land provided suitable habitat for the release of this federally endangered minnow. This reintroduction will establish “non-essential experimental” populations of Topeka shiners. Spring Creek, including some tributaries and adjacent ponds, on Union Ridge CA were also stocked with Topeka shiners in October 2014.

### **Griffith Road Low-Water Crossing Replacement Project**

The Department partnered with the US Fish and Wildlife Service, Missouri Conservation Heritage Foundation, Dallas County Commission, Great River Associates, and neighboring landowners to address an aquatic organism passage issue on the Little Niangua River. The former crossing was a concrete structure with multiple pipe culverts. The crossing structure was an impediment to fish passage during low to normal flow periods due to elevated culverts on the downstream side when the culverts were clear. In addition, the culverts were blocked by gravel deposition most of the time. Furthermore, a velocity barrier existed through the culverts and over the top of the structure during high flow periods. The crossing was replaced with a 45-foot single clear span low-water bridge providing free access to fish and other aquatic life above and below the new structure.

### **New Blue Catfish Regulation**

After considerable public outreach, a new regulation to manage blue catfish went into effect March 1, 2014. This new regulation for Lake of the Ozarks and Truman Lake establishes a protective slot for blue catfish between 26 and 34 inches. It also increases the daily limit from five to 10 fish, with two fish over the slot. The regulation will protect the population at a length range where growth is relatively fast and natural mortality is low. It will allow harvest of fish up to nearly 7 pounds, a size frequently sought by anglers. It will also encourage additional harvest of fish under the slot in order to improve growth rates and allow limited harvest above the slot while still providing larger fish protection to reach their growth potential. The regulation was developed to sustain a

high-quality blue catfish population into the future. Post-regulation monitoring is planned to track the blue catfish response to the new regulations.

### **Striped Bass Stocked**

In May 2013, striped bass fry were obtained from the North Carolina Wildlife Resources Commission and Tennessee Wildlife Resources Agency and were transported to Lost Valley Hatchery to be raised to 2-inch fingerlings. By early July, the fish were approaching the desired length.

In July, the Department released 16,000 fingerlings in the K-Dock and Theodosia arms of Bull Shoals Lake. This marked the first time the Department has stocked striped bass in Bull Shoals Lake. Historical growth rates should mean we will see legal size (greater than 20 inches) stripers in three to four years. With the species' fast growth and large size potential, these fish are on their way to providing future anglers opportunities to catch quality-sized fish and possibly another record.

Previous Arkansas stockings have made their presence known, as anglers caught many fish greater than 20 inches. Three new state records were subsequently established. The current Missouri state record for striped bass is 60 1/2 pounds.

### **Habitat Structures Installed in Bull Shoals Lake**

Fifty habitat structures were installed in the Bee Creek Arm of Bull Shoals Lake. Cedar posts were joined with other posts to a rigid frame designed to keep the base of each structure spread out and also serve as a strong anchoring point. The structures were hauled into position with the habitat barge and sunk in 20–25 feet of water. GPS coordinates were collected. SCUBA diving inspections found the vertical structures attracted good numbers of fish.

### **Southwest Switch Cane Project – 10 Years Later**

Switch cane projects can be a cost-effective alternative for Department staff and private landowners to use for erosion control along southwest Missouri streams. Switch cane is native to the Missouri Ozarks. Staff picked two project sites, one at Delaware Town Access on the James River in Christian County and another along Lake Taneycomo at Shepherd of the Hills Hatchery. Sites were planted with clumps of cane that were 3 foot by 3 foot in diameter and planted 12 to 15 feet apart. A streamside

corridor planting of trees also was part of the project. During the first couple of years a few setbacks occurred; foot traffic along the bank, mowers getting too close, campfires along the bank, and competition from the corridor tree plantings. Despite these setbacks, the cane is 8 to 15 feet tall in spots and the clumps are 8 to 30 feet in diameter 10 years later. The cane has doubled in height and is spreading out. Although not all of the foot traffic along the bank was stopped, the cane and trees have slowed streambank erosion and a healthy vegetated corridor has been established.

### **Zebra Mussels Intercepted**

Department staff was called to inspect a barge brought to Table Rock Lake from the Arkansas River that was badly infested with zebra mussels. Zebra mussels had been scraped off. The barge had also been bleached before transport. However, the barge was severely rusted and had many holes in the bottom that still housed live zebra mussels. Since these areas could not be effectively treated, the owner let the boat dry for seven days, an alternative to chemical treatment. Upon inspection a week later, no live zebra mussels were observed on the barge. Check, clean, and dry remains good advice to anyone moving watercraft from one body of water to another to prevent the spread of an unwanted aquatic species.

### **Hydrilla Control Project**

In the summer of 2012, hydrilla was confirmed in several impoundments along or near South Fork, a tributary to the Pomme de Terre River in eastern Greene County. Hydrilla is an invasive aquatic plant that can be detrimental to our aquatic resources. The Department works cooperatively with landowners to inspect potential hydrilla sites and works with those with known locations in order to control and eliminate this invasive aquatic plant. We are currently treating approximately 39 impounded acres for hydrilla with herbicide. Grass carp have also been stocked in several of the impoundments to help supplement chemical control efforts.

Department staff will continue to monitor existing infestations for treatment response and will inspect nearby ponds and streams for new populations. Our awareness and stakeholder engagement efforts have led to the discovery of two additional stands outside of the watershed. One site was in Warren County, Missouri. The second site appears to be a new introduction in a small impoundment in south-

ern Greene County. Staff will continue to monitor and aggressively treat watersheds with hydrilla.

### **Wild Turkey Research Project**

This 5-year project will provide information that will be used by the Department's Wild Turkey Management Program to monitor wild turkey populations. Project results will also be useful in evaluating the appropriateness of hunting regulations. This past winter, researchers captured more than 260 wild turkeys in Putnam, Schuyler, Monroe, and Marion counties, including 68 adult males, 74 juvenile males, and 119 females. All captured wild turkeys were banded and a portion received radio transmitters. After processing, all wild turkeys were released in the same locations in which they were captured. Researchers will radio-track wild turkeys throughout the year to determine gobbler and hen survival. Of central importance will be determining what proportion of banded wild turkeys are harvested by hunters. A toll-free phone number is printed on each leg band so that hunters can report their harvest if they shoot a banded bird. Researchers will also determine what proportion of hens successfully nest and rear young. The Department uses a science-based approach to manage the state's wild turkey population and this research project is just one of the many ways that the Department obtains the information used in its program.

### **Swamp Rabbit Survey**

The swamp rabbit, the largest North American cottontail rabbit, is a rare species in Missouri and is found in only 13 counties in the southeastern corner of the state. The greatest threat to swamp rabbits is the loss of wet forested lowlands and wooded stream banks where they prefer to live. Conservationists with the Department and Southeast Missouri State University have finished their fourth year of looking for swamp rabbits in southeast Missouri. They are especially interested in the swamp rabbits that live in Mississippi and New Madrid counties, as these two counties were hard hit by the flood of 2011. Results from the first part of the survey (covering all 13 counties) were positive in that signs of swamp rabbits were found in most (68 percent) of the places searched. In Mississippi and New Madrid counties, numbers of areas having sign of swamp rabbits greatly decreased immediately after the 2011 flood, but have increased each year since.



## **Pallid Sturgeon Restoration**

Fiscal year 2014 marked the 9th year of sampling for pallid sturgeon on the Missouri River by Department staff working on projects funded by the United States Army Corps of Engineers. This past year 121 endangered pallid sturgeon were captured. Out of those fish, 88 were produced either at Blind Pony State Fish Hatchery, Gavins Point National Fish Hatchery, or Neosho National Fish Hatchery. Twenty-four of the pallid sturgeon captured did not genetically match any parental crosses used during hatchery propagation and are considered wild-origin fish, while nine were of unknown origin. In addition to sampling for pallid sturgeon, staff helped stock 1,421 juvenile pallid sturgeon raised in hatcheries into the Missouri River at four different locations. These efforts have allowed the Department to estimate the population of wild pallid sturgeon around the Kansas City area to be less than one fish per river mile and hatchery pallid sturgeon to be nine to 16 fish per river mile. The goal is for wild-origin pallid sturgeon populations to be around three fish per river mile.

## **Wildlife Health Program Established**

Since its start two years ago, the Wildlife Health Unit has become a nationally recognized wildlife health program. Work has begun on a wide variety of issues including developing protocols for statewide Chronic Wasting Disease (CWD) control, captive cervid management and testing, rabies sample submission to the State Public Health Lab, and internal handling and management of immobilizing drugs and other controlled substances. The Department wildlife veterinarian, with the assistance of other Department staff, has developed a field guide to fish and wildlife diseases of Missouri. A wildlife health specialist has been hired to coordinate the Department's CWD monitoring efforts. The Unit's outreach efforts have included development of a four-day Wildlife Chemical Immobilization course and the presentation of an Avian Health Workshop to veterinary students from the University of Missouri as well as state and federal biologists.

## **Wildlife Code Enforcement**

The Department enforces laws in the Wildlife Code, as well as other state laws for the safe public use of Department-owned lands. Conservation agents contacted 179,950 hunters and anglers in fiscal year 2014 to ensure compliance and provide regulation information. During these contacts, agents noted

25,479 resource violations, issued 3,298 written warnings, and made 6,743 arrests. This resulted in a 99-percent conviction rate for those cases that have been completed.

## **Paddlefish-Poaching Investigation**

In March 2013, 85 Department conservation agents, 40 U.S. Fish and Wildlife Service (USFWS) special agents, and wildlife officers from other states contacted more than 100 suspects in Missouri and eight other states to issue citations, execute arrest warrants, conduct interviews, and gather additional information regarding a paddlefish poaching investigation.

The effort, known as Operation Roadhouse, included eight individuals indicted for federal crimes involving the illegal trafficking of paddlefish and their eggs for use as caviar. Other states involved were Colorado, Illinois, Kansas, Minnesota, New Jersey, Oregon, Pennsylvania, and South Carolina.

The arrests and citations were the result of a multiyear joint undercover investigation by Department conservation agents and special agents of the USFWS involving the illegal commercialization of Missouri paddlefish and their eggs for national and international caviar markets. Federal crimes tied to the poaching involve violations of the Lacey Act, which prohibits the transportation of illegal wildlife across state lines.

The prosecution phase of Operation Roadhouse continued throughout FY14. To date, 240 out of 256 state charges have been completed with \$61,488.50 in fines and court costs levied. The fine money went to the school districts in the counties where the violations were committed.

## **Elk Restoration and Management Program**

The purpose of the Elk Restoration Project was to establish a herd of elk within a pre-determined area of the Ozarks in southeastern Missouri. Relocation began in 2011 and was complete in 2013 with a total of 111 elk from Kentucky released on Peck Ranch Conservation Area. The population continues to grow and is currently estimated at 125 animals with a long-term goal of 400 to 500.

The herd is doing well. The elk are slowly expanding their range and elk viewing continues to be popular with both the local public and visiting tourists. The herd spends a majority of its time on Peck Ranch and the areas immediately surrounding. A few elk consistently use portions of Current River

Conservation Area and nearby lands west of Ellington during portions of the year.

Public land elk management conducted in 2014 includes nearly 8,000 acres of prescribed fire on 10 woodland restoration units and approximately 1,200 acres of open ground seeded with elk-friendly vegetation. Timber stand improvement was conducted on 750 acres and ongoing timber harvests continue on Peck Ranch (about 1,500 acres) and Rocky Creek Conservation Area (1,300 acres). Elk information was presented at 25 different venues in 2014 ranging from technical presentations and sportsman groups to local school events.

The Department and the University of Missouri are conducting research to provide information for more effective elk population management. Results thus far describe survival, reproduction, movement patterns, and resource selection of an introduced elk herd. Most of the elk have remained in and around Peck Ranch and primarily use the open fields within the restoration zone with grass and forbs making up an important part of their diet. The cooperative research project will continue so that characteristics of Missouri's established elk herd can be determined.

### **Elk Restoration on Private Land**

The Department continues to work with landowners in the Elk Restoration Zone to make habitat improvements that benefit elk and other wildlife. With funding from a Cooperative Conservation Partnership Initiative Program grant and the Department Landowner Assistance Program, 35 landowners received assistance in the elk zone. To date, 107 landowners have worked with the Department to plant 878 acres of green browse forage, 117 acres of native grass, and restored 298 acres of glades and open woodlands for elk and other wildlife. Activities for fiscal year 2014 included 268 acres of prescribed fire, 75 acres of green browse plantings, 21 acres of native grass planting, and 116 acres of old field reclamation. In addition, 58 miles of highway right of way (405 acres) was sprayed for spotted knapweed and sericea lespedeza infestations. This effort will help keep invasive species out of adjoining habitat projects in the area.

### **Wildfire Suppression**

The Department worked with fire departments across the state to suppress 3,843 wildfires that consumed 40,392 acres. The leading cause of wildfire continues to be the use of fire to dispose of debris.

Staff are required to attend in-house fire training prior to responding to wildfire—69 participants were trained this fiscal year. In addition, 125 Department employees are trained and hold national fire qualifications. This training is required to work on national incidents.

In fiscal year 2014, Missouri firefighters with national fire qualifications were requested to assist with suppression efforts in western United States. Six 20-person, interagency fire crews were sent to assist with fire suppression in California, Colorado, Utah, Oregon, and Idaho. A total of 54 Department staff from five divisions participated in western fire duty this year. Participation allowed Missouri firefighters to gain additional training and experience, which is beneficial for responding to fires and other disasters in Missouri.

In fiscal year 2014, the Department upgraded its network of remote automated weather stations with the addition of two satellite capable stations. These new stations replaced outdated modem based stations, bringing the total number of satellite-capable stations to 10 out of 12 stations.

### **Chronic Wasting Disease Update**

Chronic Wasting Disease (CWD) is a fatal disease that affects the deer family. The Department began testing free-ranging deer for the disease in 2001. In 2010 and 2011, CWD was discovered in captive deer in Missouri at private hunting preserves in Linn and Macon counties. The disease was first detected in Missouri's free-ranging deer herd in northwest Macon County in 2012. CWD has not been found in elk in Missouri.

The Department continues to test deer for CWD statewide. With the help of hunters and landowners, more than 40,000 deer have been tested for CWD. No additional positive animals were detected in the 2013–2014 surveillance season. Currently, the disease is believed to be restricted to a small geographic area in Macon County. The Department will continue to test deer for CWD during the 2014–2015 surveillance season. Following completion of this surveillance, the Department will reevaluate its CWD surveillance and management plan for the fall 2015 deer hunting season.

### **Muskie Management**

Standardized spring net surveys were completed on four muskie lakes.

- Pomme de Terre Lake had a catch rate of 5.4 fish per net-day. Of the muskie captured, 30 percent

were 36 inches or longer. The largest fish was a female that measured 42.5 inches long and weighed 22.75 pounds.

- Hazel Creek Lake had a catch rate of 4.7 fish per net-day. Of the muskie captured, 33 percent were 36 inches or longer. The largest fish was 42 inches long.
- Fellows Lake had a catch rate of 2.6 fish per net-day. Of the muskie captured, 28 percent were 36 inches or longer. The largest fish was 44 inches long.
- Busch CA Lake 35 had a catch rate of 0.9 fish per net-day. Of the muskie captured, 11 percent were 36 inches or longer. The largest fish captured was 40 inches long.

We were able to acquire and raise 1,986 muskie. All lakes in the muskie program were stocked with advanced muskie fingerlings that averaged 10.3 inches long.

### **Trout Sampling**

The annual Lake Taneycomo trout survey was completed in August. Rainbow trout were captured at an overall catch rate of 233 fish per hour, well within the historic normal range. Size structure decreased from previous years; however, their body condition has improved. A total of 713,552 rainbow trout were stocked in Lake Taneycomo in 2013. Brown trout were collected at a rate of 61 fish per hour. Size structure of brown trout continues to improve. A total of 15,238 brown trout were stocked in 2013. Stocking rates for brown trout were increased the past three years from a target of 10,000 to 15,000 to compensate for declining catch rates. This increase in stocking of brown trout was well represented in the sample and will contribute greatly to the rebound of the fishery.

### **Urban Fishing**

During 2013, 49 urban lakes were managed for fishing. A total of 118,290 keeper-sized fish were stocked in these lakes; this included 68,041 channel catfish and 50,249 rainbow trout.

### **Cold-Water Fish Hatcheries**

In 2013, cold-water hatcheries stocked 1,501,025 trout. These fish were distributed in four trout parks, 12 stream special management areas, and Lake Taneycomo. There were 302,932 daily adult and 61,277 daily youth tags sold at the trout parks. Anglers purchased 94,063 annual trout fishing permits.

### **Warm-Water Fish Hatcheries**

In 2013, 10.1 million fish were stocked in public waters. Highlights include:

- Blind Pony Hatchery produced 21,482 hybrid striped bass.
- Lost Valley Hatchery produced 1,986 muskie for stocking in Pomme de Terre, Hazel Creek Lake, Fellows Lake, and Busch Area Lake 35.
- Blind Pony Hatchery produced 1,235 paddlefish for stocking in Table Rock Lake.
- Chesapeake Hatchery produced 81,536 stock-sized channel catfish.
- Hunnewell Hatchery produced 6,287 hybrid sunfish for use in kids' fishing clinics.
- Hatcheries produced 166,098 channel catfish that were stocked statewide.
- Mature walleye were captured from Bull Shoals Lake and Lake of the Ozarks and transported to Lost Valley and Chesapeake hatcheries to produce fry and fingerling walleye. More than 5.7 million fry and more than 1.7 million fingerlings were stocked in seven Missouri lakes and one river.

### **Shaping the Next Farm Bill**

Congress successfully passed a new five-year Farm Bill February 7, 2014. The Conservation title represents 6 percent of the total \$956.4 billion Farm Bill funding.

Although conservation funding was reduced for the first time since 1985, this farm bill represents the first time Conservation title funding will be greater than Commodity title funding. The Farm Bill remains the single largest source of conservation funding available to private landowners.

The Department continues to actively participate in Farm Bill policy development by providing recommendations throughout the policy rule-making process for the 2014 Farm Bill conservation programs. Department involvement helps to ensure the Missouri perspective and resource concerns are considered and addressed.

### **Conservation Reserve Program**

In response to the continued loss of Conservation Reserve Program (CRP) acres in Missouri, and due to the tremendous impact CRP has in protecting our soil, water, and wildlife habitat, the Department launched, December 2012, financial incentives for enrolling new Continuous CRP (CCRP) acres to enhance existing CRP lands in 62 counties across Missouri. To date, the Department has invested

\$990,000 to improve this essential wildlife habitat on the Missouri landscape.

In fiscal year 2014, the Department's CRP Incentive helped:

- Enroll a total of 5,024 acres of Habitat Buffers for Upland Birds, State Acres for Wildlife Enhancement, and Pollinator Habitat. In fiscal year 2014, 2,629.5 acres were enrolled.
- Completed 121.4 acres of downed tree structures and edge feathering on and surrounding CRP fields. Funds have been obligated to complete 79 acres in fiscal year 2014.
- Complete 3,153 acres of mid-contract management on existing CRP fields using a combination of practices such as prescribed burn plus herbicide application, herbicide application plus legume/forb interseeding, and mowing plus disking. In fiscal year 2014, funds were obligated to complete 1,447 acres.
- Complete 1,424 acres of woody cover enhancement by applying herbicide along and under tree lines surrounding existing CRP fields. Funds have been obligated to complete 1,052 acres in fiscal year 2014.

## **Public and Private Wetland Conservation Partnerships**

The Wetland Reserve Program (WRP) is an important Farm Bill program for wetland conservation across the state of Missouri. Missouri received roughly \$4.6 million for WRP restorations last year. This funding supported the enrollment of 13 new easements totaling 1,804 acres. Missouri maintains the sixth highest number of WRP acres and the third highest number of easements. At least 149,500 acres of wetlands have been restored through the WRP and the Emergency Wetland Protection Program in Missouri. About 92 percent of these acres are enrolled in perpetual easements and will provide water quality benefits, flood abatement, and essential habitat for resident and migratory birds into the future.

The Wetland Reserve Enhancement Program (WREP) is a cooperative program between Natural Resource Conservation Service (NRCS) and the Missouri Department of Conservation that provides funding opportunities to enhance wildlife habitat on existing WRP easements. In total, WREP directly impacted 13 WRP easements in five counties with 2,473 acres improved throughout the length of the program with \$350,264 being expended.

An innovative partnership between the Department and the Missouri Department of Natural

Resources was developed to restore and enhance native wet prairies and bottomland hardwood habitats on the Pershing State Park. In addition to the habitat creation and enhancement on public lands, it will provide a means to assist with the management of wetland habitats on adjacent private lands. To date, 40 acres of bottomland hardwood species have been planted on Pershing State Park.

## **Private Land Habitat Challenge Grant**

This is the seventh year the Department provided the Habitat Challenge Grant. This past fiscal year, the Department awarded \$150,000 in funding to partner organizations, including Quail Forever, National Wild Turkey Federation, and Quail and Upland Wildlife Federation. Each organization provides matching funds to help private landowners complete habitat work. Over the past seven years, the Department has provided more than \$800,000 in funding through the grant, totaling more than \$1.5 million with partner contributions.

## **Urban Conservation and Partnerships**

Community Conservation Planners work to deliver natural-resource technical services at the municipal, county, and regional levels with communities, city planners, and developers. Recent accomplishments include:

- Participated on a 30-member Stormwater Management Task Force, appointed by the Springfield City Council and Greene County Commission.
- Provided technical assistance for a cadre of 319 Nonpoint Source Implementation Grant projects implemented by the Big Urbie partnership.
- Participated on the planning committee for the 2013 Missouri Chapter Conference of the American Planning Association.
- Partnered with the Harry S. Truman Coordinating Council in Southwest Missouri to develop an Environmental Planning Program to be piloted over a three-year period.
- Completed a successful two-year pilot at Queeny Park in partnership with St. Louis County which provided the template to initiate the Back to Nature Grant program.
- Partnered with the City of St. Louis and the Missouri Botanical Garden that launched The City of St. Louis Urban Vitality & Ecology Initiative to create socially vibrant, ecologically thriving, economically beneficial places to connect people to nature where they live, work, learn, and play.



- Cohosted the third annual “Partners for Native Landscaping: A Workshop for Homeowners” event drawing 450 people to learn how to use native plants to create sustainable wildlife-friendly landscapes.
- Facilitated the adoption of an integrated sustainable development strategy created for the 400-plus-acre site near the confluence of the Middle Blue River and Brush Creek near Kansas City, Missouri.

## **Hellbender Restoration**

Significant progress was made in efforts to restore the Ozark and eastern hellbender. The Department's Shepherd of the Hills Hatchery in Branson and the Saint Louis Zoo's Ron Goellner Center for Hellbender Conservation, with support from other agencies and private citizens, have been partnering to carry out cutting-edge propagation efforts while addressing the reasons for the decline of this species. Currently, the hatchery is rearing several hundred eastern hellbenders obtained from eggs collected in the wild. Successful captive breeding of Ozark hellbenders occurred at the St. Louis Zoo for the third consecutive year, producing over 600 larvae. In addition, the zoo reared approximately 3,500 larvae and juvenile hellbenders obtained from eggs collected in the wild and eggs obtained from captive breeding in previous years. During the summer of 2013, 150 eastern hellbenders raised at the hatchery and 602 Ozark hellbenders raised at the zoo were released in their native Ozark rivers. These hellbenders will be monitored to determine the success of captive-reared hellbenders in the wild. These achievements will not only buy time to further address the decline of the species, but will likely be the “safety net” needed to save this unique native of the cold-water streams of the Ozark Highlands.

## **Deer Management**

Hunters and landowners are asking the Department to address long-term declines in deer populations resulting from higher doe harvest and hemorrhagic disease outbreaks in 2007, 2012, and 2013. Deer regulations have been approved for the 2014 season to address these declining populations. In southern Missouri, the 2013 deer harvest was a typical reflection of average acorn production and slowly increasing deer populations, despite 2012's record low acorn production and hemorrhagic disease outbreak that increased harvest rates and natural mortality, respectively.

In the summer of 2014, a five-year study was approved to evaluate survival, reproduction, and movement of deer in north and south Missouri. Recent large-scale changes have occurred including land use patterns, hunter behavior, deer densities, and harvest vulnerability, which may have had significant but as yet unknown impacts on deer survival and movement patterns in these regions. Information from this project will be applied to deer population models and disease management protocols to improve deer management and guide possible future proposed regulation changes.

The Missouri Department of Conservation conducted 14 open houses during the summer of 2014 to engage stakeholders and seek input regarding deer management, including hunting season structure (e.g., time, methods, limits), deer population levels and trends, and feedback on the deer management plan. This is one of the steps in a continual effort to engage and communicate with the public on deer management and regulations topics.

## **Ruffed Grouse Study Update**

In response to declining grouse numbers, the River Hills Forest Habitat Partnership was formed in 2000 with an objective of restoring and maintaining young oak-hickory forests within the region of Boone, Callaway, Warren, and Montgomery counties. Recent research shows that although suitable habitat in the River Hills is currently lacking, it is likely that grouse restoration could be successful if the amount of young forested habitat on public and private land was increased considerably and maintained through time. This effort would require using regeneration harvests to increase the amount of young forest (less than 25 years old) to between 20–25 percent on public land. It would also involve working with landowners in the region to increase the amount of grouse habitat on private lands. Specific acre targets must be met for a grouse re-introduction to occur and to increase our chances of success. We continue to work closely with the Quail and Upland Wildlife Federation Grouse Chapter. Our partners understand that the Department will work to achieve the public land goals and continue to support efforts with private landowners.

## **Black Bear Research Project**

Black Bear Research Project RSD6

Unregulated hunting and habitat changes took its toll on Missouri's black bear population, and, by the 1940s, bears were considered eliminated from

the state. However, recent DNA evidence from our research suggests there may have been a small population in southwest Missouri that remained. In addition, bears likely moved into Missouri following reintroductions by Arkansas. Today, reports of bears and cubs are common in south Missouri. Department research shows a population of nearly 300 bears. Missouri bears appear healthy; males weighed up to 485 pounds and females to 220 pounds. Males moved an average of 127 square miles and females moved 40 square miles annually. Female bears are entering dens in late November and males in early December. The oldest bear captured was 15 years old. Current research will measure survival and productivity of females so that we can forecast growth of our bear population, which will help us determine when to begin a hunting season. In addition, we will study suitable black bear habitat and identify travel corridors that link large tracts of suitable habitat. Currently, 25 female bears and 10 sub-adult males are radio marked. In 2014 a group of bear enthusiasts formed the Missouri Black Bear Foundation and are actively promoting black bears and bear awareness programs throughout the state. In addition staff from the Department and the Conservation Federation of Missouri attended city council meetings in Willow Springs, Missouri, as they move to designate Willow Springs as “Bear City Missouri.”

### **Endangered Species**

Department staff annually monitor many of the 34 federally endangered or threatened plant and wildlife species in the state. Notable highlights include efforts to increase densities of the endangered American burying beetle (*Nicrophorus americanus*), Topeka shiner (*Notropis topeka*), and grotto sculpin (*Cottus specus*). In cooperation with the U.S. Fish and Wildlife Service and the St. Louis Zoo, the Department helped release 172 pairs of American burying beetles on Wah’ Kon-Tah Prairie in Cedar and St. Clair counties. The beetles were propagated at the St. Louis Zoo and subsequent surveys of the release sites revealed that 85 percent of the released pairs had produced larvae. Monitoring will continue to track the progress of this experimental population.

Habitat improvements were also made for the federally endangered grotto sculpin in partnership with private landowners. Grotto sculpin are found in five caves and one stream in Perry County and their health is very dependent on local groundwater from sinkholes and other drainage in the area. This

year, five sinkholes on private land were cleaned, removing nearly 140 tons of household trash, metals, tires, and other refuse. Another five acres of sinkholes were also fenced to exclude livestock. Another site removed 1,281 tires from a sinkhole using the Bridgestone Tire Company Program! Current efforts are underway to investigate grotto sculpin population information, life history strategies, and monitoring methods so that future managers can better understand how to assess the health of these fish in such a unique and challenging environment.

### **Invasive Species**

Department staff are working together to remove threats from invasive weed species in Southeast Missouri and the eastern Ozarks. Directed by local Department staff, trained crews from Americorps scouted and treated over 205 miles of highway rights of way identified as highest priority. More than 2,271 acres were covered with a total cost of approximately \$77,000 including labor, lodging, chemicals, and supplies. The estimated reduction of these populations because of the control efforts is 90 percent.

### **Furbearers and Trapping**

A combination of favorable weather and strong fur prices in the previous season resulted in high participation by hunters and trappers in the 2013 fur harvest season. The Department sold more than 10,000 trapping permits, which is a 25-year high. The coyote harvest was the highest in 25 years. Participation by furbearer hunters has been increasing. Recent survey data suggest more than 13,000 hunters pursued raccoons and more than 25,000 hunters pursued coyotes this past year. Market trends for the 2014 season suggest that pelt values for many furbearers are losing strength as territorial disputes in Russia and tariffs in China add uncertainty in the fur industry.

### **Conserving All Wildlife**

The Department's habitat and species conservation program will be more strategic through the continued development of the Comprehensive Conservation Strategy (CCS). Since the initiation of CCS in January 2012, the Department has integrated guidance from landscape-level assessments and priority setting exercises (i.e. Comprehensive Wildlife Strategy, Aquatic GAP analysis, Forest Action Plan, Fisheries Watershed Priorities), as well as species plans, area plans, and recovery plans, into a common blue-

print for Missouri's priority lands and waters that conserve plants, forest, fish, and wildlife. Proposed network designs have been developed for all of the different habitat types in Missouri, and the final stages of integrating them into one "blueprint for conservation" are approaching. Regional staff have identified nine priority geographies for additional habitat work, and the Department is building the support for priority geography work teams.

### **Missouri Forest Ecosystem Project**

The Missouri Forest Ecosystem Project (MOFEP) is a landscape scale, long-term experiment to study the impact of different types of forest management on plant and animal populations in Missouri oak-hickory forests. MOFEP highlights from fiscal year 2014 include:

- **Down Dead Wood:** Down dead wood (limbs and branches you see on the forest floor) is an important component of forest ecosystems. It provides habitat for many insects and animals, including salamanders, lizards, snakes, shrews, and mice. It also is a key component of how the forest recycles nutrients, provides fuel for prescribed fires and/or wildfires, and stores carbon. Researchers collected data on down dead woody material on 226 feet of line transects on all of the 648 MOFEP vegetation plots to determine how different forest management practices affect the amount and size structure of the woody material.

## **Manage Lands in Public Trust**

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### **Grassland Initiative**

The Grassland Strategic Plan was formed to provide sound guidance as future grassland conservation opportunities are addressed.

Substantial grassland restoration projects began this year. Restoration will remove undesirable trees and invasive plants from historical grassland in favor of rich, locally adapted grasslands. This removal will replace cropland and fescue to better support rabbit and quail populations. The projects will also help rare grassland wildlife like regal fritillary butterflies, prairie mole crickets, crawfish frogs, and grassland songbirds. New grasslands totaling 1,400 acres at Linscomb and Schell-Osage Conservation Areas will help to connect existing prairies in important grassland landscapes. A similar project on Wayne Helton Memorial Wildlife Area will

restore 515 acres of grassland, and three smaller projects in Clark County will improve 186 acres for the Blanding's turtle.

Staff continued to implement innovative projects to help imperiled grassland birds. Ongoing monitoring conducted by the Missouri River Bird Observatory (MRBO), informed by Geographic Information Systems analysis of recent management, will enable managers to build ideal habitat for Henslow's sparrow, upland sandpiper, eastern meadowlark, and bobwhite quail. Wildlife staff partnering with Audubon's Prairie Bird Initiative made significant headway toward defining and implementing market-based conservation incentives to improve privately owned grazing lands. MRBO also conducted breeding and post-breeding season monitoring on 16 privately owned tracts as part of the PBI partnership; each property received an overall bird-friendliness score—a graphic representation of bird monitoring data that is easy for landowners or the public to understand. Greater prairie-chicken recovery remains a priority. The translocated population at Wah'Kon-Tah Prairie has remained stable since translocations ceased in 2012. Prairie-chickens were again released at The Nature Conservancy's Dunn Ranch under a cooperative agreement with The Nature Conservancy and Iowa Department of Natural Resources. Reports also indicate that many ground-nesting birds experienced good nesting success during 2014.

### **Shepherd of the Hills' 7 Millionth Visitor**

Shepherd of the Hills Hatchery Conservation Center greeted its 7 millionth visitor August 13, 2013. They were the Bauer Family from Bancroft, Iowa. While the Hatchery has been in existence since 1958, no visitation records were kept until 1980 when the Conservation Center was established.

### **Trip Advisor Certificate of Excellence**

In June 2014, the Cape Girardeau Conservation Nature Center received a TripAdvisor® Certificate of Excellence award. The accolade, which honors hospitality excellence, is given only to establishments that consistently achieve outstanding traveler reviews on TripAdvisor and is extended to qualifying businesses worldwide.

## **Anniversaries**

The Springfield Conservation Nature Center celebrated its 25th anniversary with special events in October 2013. Millions of people have discovered nature at the beautiful interpretive center and on its 3 miles of hiking trails through forests, fields, and marsh. Columbia Bottom Conservation Area, located at the Confluence of North America's two largest rivers, celebrated a 10th anniversary in May 2014. To commemorate the anniversary, the Department hosted a series of special programs free for the public. In addition, a special pictorial display showed the history of Columbia Bottom's Howard and Joyce Wood Education and Visitor Center. The structure is based around the old barn that stood at the same spot on the area. The wooden post-and-beam skeleton from that original structure can still be seen in the current visitor center.

## **Evaluating Efficiency of Transplanting Mead's Milkweed**

Mead's milkweed is a long-lived perennial found on tallgrass prairies as well as glades within the Ozarks. Mead's milkweed populations have declined with the overwhelming loss of tallgrass prairie and struggle even in protected, high-quality prairie remnants. This plant is currently listed as federally threatened and state endangered in Missouri. Transplanting seedlings has been suggested to be an important technique in the recovery of Mead's milkweed.

A three-year study has just been completed that monitored the survival and growth of newly established Mead's milkweed populations by transplanting greenhouse-reared seedlings. Six populations of 100 seedlings were planted in 2011. As of June 2014, a quarter (26 percent) of the plants remain alive. This project expanded and strengthened the distribution of Mead's milkweed on high quality prairies and historical sites in Missouri. It also provided ideas for future studies regarding site characteristics and planting conditions that will improve future transplanting efforts, and identified management practices that could have negative impacts for Mead's milkweed. Monitoring these transplants will continue into the future along with collection of seed from viable populations which is essential for continuing transplanting efforts.

## **Public Input on Area Plans**

The Department manages 956 properties (totaling nearly 1 million acres) statewide for the purpose

of restoring and conserving fish, forest, and wildlife resources and providing appropriate public use, research, and demonstration areas. Conservation area management plans document strategies for natural resource management and public use on conservation areas. In fiscal year 2014, staff drafted 128 plans that cover 239 conservation areas and accesses. These draft plans will be available for a public comment period during fiscal year 2015.

For the first time, 47 area plans (covering 109 areas) were posted for public comment and additional comments were received during "high interest" idea gathering stages for Rockwoods Reservation, Springfield Conservation Nature Center, and Peck Ranch Conservation Area. Over 500 public comments were collected.

Public review of area plans offers a new opportunity for Missourians to comment about the management of a specific conservation area. Following the comment period, comments are summarized and the final version of the area plan includes responses to public comment categories. Area plan comment opportunities and final plans may be found online at [mdc.mo.gov/areaplans](http://mdc.mo.gov/areaplans).

## **Continuous Forest Inventory**

In 2010, the Department embarked on a mission to better monitor Department forestlands. The Continuous Forest Inventory program is designed to collect and report on the condition of the forest in a statistically sound manner and report the findings annually. The demand for timely, consistent, and reliable information regarding the condition of Department forestlands is in high demand. The project is long-range in nature. Our goal is to install 462 plots over five years. In fiscal year 2014, we installed 93 plots bringing the total number of plots to 370.

## **Forest Best Management Practices**

The Department implemented and maintained soil and water conservation best management practices for all forest-management activities on conservation areas. The Department monitors and documents compliance on all timber sales with about 10 percent of these sales formally audited annually. Last fiscal year, 72 sites on 2,686 acres were reviewed for proper implementation and effectiveness. In addition, all active timber sales were routinely inspected for contract compliance including best management practice implementation.



## Land Management

The Department continues to conduct active management on Department lands for all wildlife and their habitats. This year, Department staff conducted habitat management on nearly 200,000 acres of public land to include: 39,035 acres of wetland, 33,445 acres of woodland/forest/savanna, 86,685 acres of cropland (74,576 acres through permittee farmers and 12,109 acres in food plots), 29,813 acres of grassland/prairie, 19,920 acres of old fields, and 3,499 acres of glade. In addition, forest and woodland habitat improvements were conducted on 53,660 acres of state land. This included thinning young trees on 4,767 acres, eradicating invasive plants on 4,663 acres, post-sale cultural work on 1,121 acres, prescribed fires on 11,473 acres, 138 acres of tree planting, and tree harvest on 6,311 acres.

## State Forest Nursery

The State forest nursery annually grows and distributes close to 3 million seedling trees of more than 60 species. The seedlings include trees and shrubs suitable for reforestation and wildlife-habitat restoration. The seedlings are planted on both public and private lands statewide. The nursery filled more than 9,300 orders involving more than 20,000 packages of seedlings, with a customer satisfaction rate of more than 99 percent.

## Land Acquisition—

For conservation and public use, about 4,346 acres were purchased and approximately 246 acres were donated. Department land purchases included additions to: Coffin Conservation Area, Angeline Conservation Area, Big Buffalo Creek Conservation Area, Rocky Creek Conservation Area, Busiek State Forest & Wildlife Area, Danville Conservation Area and Sunklands Conservation Area. Land donations included additions to: Sunklands Conservation Area, Beaver Creek Conservation Area and Mule Shoe Conservation Area.

## Construction

- Motorboat access development at Platte Landing Park
- Maramec Spring Fish Hatchery Pool 5 screen and weir replacement
- Blind Pony Fish Hatchery production ponds renovation—phase four
- Blind Pony Fish Hatchery production building expansion

- Chesapeake Fish Hatchery shop building replacement
- Chesapeake Fish Hatchery paddlewheel aerators
- Shepherd of the Hills Fish Hatchery production well improvements
- Timber Knob Tower replacement
- Burr Oak Woods CA ADA trail renovation
- Duck Creek CA headquarters renovation
- Kendzora CA replaced water control structure
- James A Reed Memorial WA road system renovation
- Rippee CA bridge improvements
- Springfield Conservation Nature Center walking trail renovation

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## Sound Financial Accountability

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### Maramec Spring Hatchery Raceway Improvement

The largest rearing pool at Maramec Spring Hatchery received a much-needed upgrade. The old iron screens in the raceway were replaced with self-cleaning drum screens. The result was an immediate increase in staff efficiency and safety. Now debris such as leaves, aquatic plants, sticks, and algae all get lifted over the screen and passed downstream to the tail waters. An added benefit to the screen replacement project was increased protection for the fish. Undetected clogs could result in a fish kill due to a lack of flow. Maramec has returned to full production as a result of this improvement. The project was partially funded under provisions of the Federal Aid in Sport Fish Restoration Act.

### Fish Trades Benefit Missouri Anglers

Department fish hatcheries operate as a system, providing species or species at sizes not readily available from other sources. On occasion, we have fish in excess of our needs to meet fish stocking plans or a need for species that do not have brood stock readily available. Staff coordinate through the Mid-Continent Fish Conference each year. This process, similar to a commodities trading pit, allows fish hatchery managers across the country to barter with surpluses or obtain fish needs elsewhere. The Department also uses direct contact to fulfill special needs.

In 2013, the Department sent 200,000 crappie fingerlings to Kentucky; 245,000 channel catfish, mostly fry, to Iowa; and 682,301 walleye eggs to

Arkansas. In return, we received 6,096 alligator gar fingerlings from Oklahoma; 10,027 fingerling grass carp and 500,000 hybrid striped bass from Arkansas; 200,000 striped bass fry from Tennessee; 150,000 striped bass fry from North Carolina; and 2,285 muskellunge from Iowa. Our cooperation with other states helps us meet our goal of providing additional specialty fishing opportunities to Missouri citizens.

### **Timber Sale Administration**

The Department enhanced timber sale administration by encouraging the use of pre-harvest planning, the use of performance-based timber sale administration, and the best bid system. By encouraging the use of pre-harvest planning, timber sale administrators and Professional Timber Harvesters (PTH) loggers work together to lay out and design the most effective and efficient timber harvesting operations. Proper planning is the first step in the effective implementation of best management practices for protecting water quality. The performance-based timber sale administration system ties the sale administration directly to the timber sale contract. By encouraging staff to attend PTH training we get a better understanding of the complex nature of the mechanics involved in felling and extracting our timber resources. These efforts will serve as an example and encourage loggers to perform to a higher level.

### **Human Resources Processes**

Department staff automated and streamlined two human resources processes by implementing a new Human Resources Information System and a Time and Leave System. These systems were chosen based on revisions recommended by consultants.

### **Department-wide Training**

Current and future state-wide training needs were identified and courses were developed to fulfill those needs for Department staff. Also, courses were offered to educate staff on federal and state employment laws, including the topics of diversity and harassment, and safety-related courses; fairs, and events were held state-wide.

### **Health Benefits**

The Department monitored requirements of the Patient Protection and Affordable Care Act and implemented requirements of this legislation. Staff developed online information availability and elec-

tronic communication for employees and members of the Conservation Employees' Benefits Plan.

### **Internships Encourage Diversity**

The Department began its 11th year of an internship program. Objectives are threefold: expose students to a variety of professional tasks and the Department's culture, mentor promising students in disciplines in which job candidates are scarce, and attract students with diverse cultural backgrounds to contribute to the Department's workforce. In fiscal year 2014, students from four colleges and universities worked in the internship positions, which were diverse in both location and job responsibilities.

### **Disaster Relief**

The Department's Disaster Incident Command System is prepared to assist with Missouri disaster situations. At the request of Missouri's State Emergency Management Agency (SEMA), Department staff provide services to affected communities, which includes using heavy equipment, ATVs, boats, and vehicles for various requests. Staff also provides security details and traffic control when needed.

### **Conservation Goals and Priorities**

The Department developed goals and conservation priorities for fiscal year 2014 to serve as an annual strategic plan. The conservation priorities address the most important conservation challenges within the next three years. To increase communication of the goals and priorities, a brochure and video presentation were prepared about the Department's mission, vision, goals, and priorities. View the video at [youtube.com/watch?v=LrqZNPjy4sw](http://youtube.com/watch?v=LrqZNPjy4sw).

## **Citizen Involvement/Education**

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### **Community Conservation**

Nine community conservation projects were funded through the Department's St. Louis Region Community Conservation Grant Program. Partner organizations received a total of \$80,000 to implement habitat reconstruction projects. Partners include Bellefontaine Cemetery, City of Chesterfield, Confluence Chapter of Missouri Master Naturalists, Francis Park, St. Louis Zoo, St. Louis County Park, The Green Center, City of Washington, and Webster University. Grant funds are being used to convert turf to prairie, construct a sedge meadow, restore

stream banks, create native pollinator habitat, control invasive species, and restore a natural spring.

The Department also made great strides in restoring and reconstructing the prairie remnant at Calvary Cemetery in northern St. Louis City. Partnered with the Archdiocese of St. Louis and Missouri Botanical Garden, the Department supervised and completed the first phase of a long-term restoration plan to restore this last remaining prairie remnant in the St. Louis metropolitan area.

### **Urban Deer Summit**

August 27, 2013, the Department's Urban Deer Task Force hosted the first Urban Deer Summit in Columbia, Missouri. The Summit's objective was to share information about urban and suburban white-tailed deer, discuss management strategies used across the state, solicit feedback regarding deer management issues, and cultivate relationships and communication among community representatives. Forty-seven community representatives participated in the Summit. Several themes emerged from dialog with participants: public safety is the primary motivation to managing deer populations in communities; community leaders rely on Department staff as the experts in deer and wildlife management issues; community leaders and urban and suburban residents care about a healthy, sustainable deer herd; there is no one-size-fits-all solution for deer management in communities; and community leaders are an important resource for each other when dealing with deer issues. At the end of the day, participants were asked to evaluate the summit as a whole. Ninety-seven percent of participants felt the workshop was beneficial and that their comments were heard, and 100 percent of respondents would recommend the Urban Deer Summit to a friend or colleague.

### **Managed Hunts**

Managed hunts for deer, turkey, waterfowl, and doves continue to be an effective way to reach new and seasoned hunters to provide unique hunting opportunities. Youth-only managed hunts and hunts for those with disabilities are well-attended and provide additional opportunities. In the 2013–14 deer season and 2014–15 spring turkey season, 5,864 total hunters participated in managed hunts, including 483 youth hunters. Throughout the 2013–14 waterfowl season, over 37,000 hunter trips were accommodated at the Department's 15 intensively managed wetland areas, including 600 youth hunter trips.

### **Association of Conservation Information Awards**

The Department's publication and communication efforts won 14 awards at the 2014 Association of Conservation Information conference. Award categories include communications campaign, audio program, education and outreach, posters, publications, photography, graphics, magazine, video, and television.

### **Discover Nature—Fishing**

Discover Nature—Fishing was designed to teach basic fishing skills to kids and families in a hands-on, fun, and engaging way. A new Discover Nature—Fishing instructor guide was created that will serve as a model for additional outdoor skills instructor guides. Like all other Discover Nature programs, Discover Nature—Fishing's primary goal is to empower Missouri kids and families to gain the skills and confidence to continue the activity on their own. In fiscal year 2014, there were 129 Discover Nature—Fishing programs held statewide.

### **Xplor Magazine Wins 2014 Parents' Choice Award**

Xplor, the Department's magazine for kids of all ages, was awarded a 2014 Parents' Choice Seal of Approval. Parents' Choice Foundation is the nation's oldest nonprofit consumer guide to quality children's media. The Foundation recommends products that entertain and teach with flair, stimulate imagination, inspire creativity, and help children grow socially, intellectually, emotionally, and physically. Only about 20 percent of items submitted to the Parents' Choice Awards program receive recognition. Xplor has about 175,000 subscribers.

### **Hunter Education**

A new Hunter Education program was launched this year. The two-session format includes knowledge and skills components. The knowledge session can be completed online, by self-study, or in a classroom. The skills session is taught by certified instructors and provides hands-on application of safe hunting practices.

### **Mass Communication**

The Department adopted GovDelivery, a mass emailing system that allows staff to create and send emails with a consistent look, with images, on a wide variety of topics. It also allows the public to

easily update their email addresses and subscribe to more topics. The system has a large network of state agencies that can share topics among their subscribers, allowing followers of each agency to discover new topics from different agencies.

### **Citizen Input on White-tailed Deer**

Eight "Protecting Missouri's White-tailed Deer" public meetings occurred fall 2013. A total of 695 people attended these public meetings, and the Department collected nearly 1,500 comments via comment cards and online. Comments received were very supportive of the Department's efforts to slow the spread of Chronic Wasting Disease.

Deer Management Open Houses were conducted during summer 2014 to gather public input regarding possible white-tailed deer regulation changes such as season timing, bag limits, and archery methods. Nine of the 14 open houses were conducted during fiscal year 2014, reaching 841 people interested in deer management in Missouri. For those who could not attend the open houses there was a virtual open house on the Department website allowing people to download every handout available at the open houses and also allowing citizens to provide the same input online as if they had attended an open house. Comments received will be used to help inform deer management decisions.

### **Stakeholder Engagement Planning Workshops**

The Stream Unit continued reaching out to regional staff and partners to teach stakeholder engagement planning. Being better acquainted with this topic will help staff to more successfully engage stakeholders in priority watersheds and geographies. Sixty-eight people attended the workshop. Follow-up evaluations were overwhelmingly positive. This training was also shared with partnering states (Iowa, Minnesota, and Wisconsin).

### **Fishing Workshops**

Department staff provided opportunities to learn about a number of diverse aquatic outdoor pursuits.

- The 5th Annual Paddlefish Snagging Clinic (Warsaw) provided instruction on paddlefish biology, management, equipment rigging, fish preparation, and a fishing trip.
- A Bow Fishing Workshop was piloted in the Southeast Region. It provided instruction on fish identification, fishing locations, techniques, regulations, fish preparation, and a fishing trip.

- The 2nd Annual Frog Giggling Clinic (Blind Pony Fish Hatchery) provided instruction on biology, history of frogging, regulations, harvest methods, safety, and frog preparation. Participants were able to harvest frogs starting with archery methods, but shifted to gigs after dark. Participants concluded the workshop by dining on frog legs.
- The 7th Annual Mozingo Lake Ice Fishing Clinic provided ice fishing gear, bait, and instruction. Catch included bluegill, crappie, and largemouth bass.
- The Mississippi River Catfish camp provided an opportunity for individuals and families to learn big river fishing techniques, fish biology, and regulations.
- The Piedmont Youth Giggling Workshop provided instruction on safety, fish identification, regulations, fish preparation, and a fishing trip. A fish fry concluded the event.

These workshops provide an opportunity for novices and experienced individuals to learn more and become motivated to participate in fishing.

### **Fishing Events**

Department staff provides numerous organized fishing opportunities to targeted audiences throughout the state. Some examples include:

- 12th Annual A Day at the Ol' Fishing Hole (Rolla)
- 13th Annual Kids Fishing Day (Lost Valley Fish Hatchery)
- 15th Annual Fatherhood First Fishing Clinic (Jerry P. Combs Lake)
- Big River Fishing Clinic for Youth (St. Joseph)
- Cosmo-Bethel Park Lake Cub Scout Fishing Event (Columbia)
- Fall Kid's Fishing Day (Roaring River)
- Jackson Middle School Fishing Clinic
- Family Fishing Fair (Shepherd of the Hills Fish Hatchery)
- Family Fishing Clinic (West Plains)
- Kids Fishing Day (Bennett Spring, Maramec Spring, Montauk, and Roaring River trout parks)
- Maramec Spring Ladies' Fishing Day
- National Hunting and Fish Day (James A Reed Memorial Wildlife Area)

These events are successful due to the support of our many partners.

### **Tire Round-Up**

Missouri Stream Team and Department staff collaborated to remove tires dumped into streams and sinkholes to improve karst habitat from Perry to Stoddard counties. In the two-day tire round-up, vol-



unteers and our staff removed nearly a 1,000 tires from a stream, two farms, and a conservation area. Many of the tires were recycled. The rest were disposed of properly.

### **Nature Center Use Surveys**

Department staff have worked together to develop an easy-to-use system for nature center and interpretive site managers to conduct visitor use surveys. This system gives managers the ability to collect information on visitor numbers and attitudes in a timely manner to help them develop programs, budget for displays, and assign staff and volunteer time. Since being designed, this system has been used to conduct visitor use surveys at 10 of the Department's 12 nature centers and interpretive sites across the state.

### **Social Media**

Social media connects the Department with Missourians. The Department's Facebook page has more than 117,000 "likes" and reaches almost 75,000 people per week who share our information with more than 5.5 million friends. Our Twitter feed has more than 5,000 followers who then pass our tweets along to thousands more. The Department's YouTube channels contain more than 1,000 videos and average about 100,000 views per month with more than 8.5 million total views. Department online photos through Flickr offer over 1,000 images with more than 2,500 reader photos, which have had more than 295,000 lifetime views.

The Conservation Department has also recently delved into the world of Google+ Hangouts, an instant messaging and video chat platform, allowing a new way for the Conservation Department to reach a more diverse audience. To follow the Department on Facebook, Twitter, Google+, YouTube, Flickr, Pinterest, Slideshare, or RSS feeds, visit [mdc.mo.gov](http://mdc.mo.gov) and click on the icons at the bottom of the page.

### **Discover Nature Schools**

Discover Nature Schools helps teachers engage students in hands-on, outdoor, place-based learning. Discover Nature Schools units are available for pre-kindergarten through high school and are in 79 percent of Missouri school districts. Thus far, 230 schools taught the primary unit, 635 schools adopted the elementary habitats unit, 415 schools taught the middle-school aquatic unit, and 230 schools adopted the high school ecology unit. A pre-kindergarten

unit has been developed and is being field tested. Home schools also use the Discover Nature units.

Along with student books, teacher guides, and science notebooks for each unit, the Department provides free training and grants for exploration equipment, outdoor classroom materials, and field experiences. Conservation grants supporting Discover Nature Schools totaled \$245,615.

In addition, teachers were introduced to the Discover Nature Schools Science Fair initiative in January 2013. The initiative was promoted through the Department website, *Missouri Conservationist* magazine, press releases, Twitter, and Facebook.

### **Hunting and Fishing Opportunities**

During the past fiscal year, we issued 5,545 hunting-method exemptions to help disabled hunters enjoy Missouri's outdoors. We also issued 478 group-fishing permits to help Missourians who otherwise might not be able to participate and learn about outdoor fishing activities.

### **Agent Outreach Efforts**

Conservation agents represented the Department at 5,576 meetings with civic groups, schools, church groups, and other organizations. Agents completed 6,736 radio and television programs, published 2,525 newspaper articles, and conducted 2,047 exhibits. As part of their community relations efforts, agents contacted more than 467,099 citizens and answered 150,795 phone calls.

In fiscal year 2014, conservation agents organized four Discover Nature Girls Camps throughout the state. These events are three-day, two-night summer camps where girls between the ages of 11 and 15 are taught the hunter education program. In addition to becoming hunter-education certified, the girls are also taught outdoor skills such as archery, canoeing, fishing, tree-stand safety, and Dutch oven cooking. Since the program's inception in 2008, approximately 500 girls and chaperones have been hunter-education certified through the camps. The Department continues to expand this popular program.

### **Technical Assistance to Landowners**

The Department provided timely and responsive service to landowners through 43,122 rural and urban contacts, including 7,153 on-site visits. Assistance was offered to landowners who wanted help with habitat management plans resulting in 1,900 habitat management plans being written during fiscal year 2014.

## **Wildlife Damage Management**

The Wildlife Damage Management program helps landowners experiencing wildlife conflicts. This is done through phone calls, mailings, workshops, and on-site visits. This program serves more than 3,900 landowners annually. In addition, wildlife damage biologists gave 43 programs on trapping and damage prevention to 1,509 participants. This program also reached Missouri citizens by participation in 23 special events, 30 trapping workshops, and 22 media contacts. The program maintains partnerships with other agencies and nongovernmental organizations including the Missouri Trappers Association, U.S. Department of Agriculture (USDA) Animal and Plant Health Inspection Service — Wildlife Services, Missouri Department of Agriculture, Missouri Department of Natural Resources, and the USDA Forest Service.

## **Call Before You Cut**

Call Before You Cut is a voluntary forest landowner information program. Landowners are urged to call a toll-free phone number or visit a website for information about the benefits of a professional forester. In fiscal year 2014, 480 landowners covering 41,475 acres requested information. Since 2009, 1,696 landowners who control more than 187,479 acres of forest have been sent information.

## **Habitat-Management Workshops**

The Department held or participated in more than 543 habitat management workshops and field days for more than 32,000 private landowners. The workshops focused on management techniques to benefit early successional wildlife such as quail, rabbits, and grassland birds.

## **Private Lake and Stream Management**

Fisheries staff responded to 4,795 requests for watershed, floodplain, riparian corridor, stream, or lake management information and/or technical assistance. Six hundred and fifty-five on-site visits were made and 106 recommendations or management plans were written. On-site work included 137 fish-population surveys, 17 renovations, and 51 fish-kill investigations. Staff conducted 19 stream or lake management workshops for 835 people. Staff also coordinated or participated in 14 active watershed-management projects.

## **Angler Recognition**

The Department presented a Master Angler certificate to 278 anglers. Also, new state records were

issued to anglers for gizzard shad, quillback, and spotted sucker.

## **Trout Opening Day**

The spring branches of our four trout parks were stocked with more than 30,000 12.5-inch (average length) trout in preparation for opening day. Stocking rates are based on expected attendance. Bennett Spring Park recorded 1,626 tags, including 148 youth tags. Maramec Spring Trout Park recorded a total of 1,273 tags, including 136 youth tags. Participation in the trout opener remains an important family tradition. Our trout parks provide an opportunity for many, including our youth and disabled anglers.

## **Free Trees Promote Forest Awareness**

The Missouri Department of Transportation and the Department entered into a new Cooperative Agreement to support the Trees for Tomorrow program, an effort designed to raise awareness of Missouri's forests and increase understanding of the benefits of trees. The agreement is renewable for up to 5 years and provides the Department \$75,000 annually for free tree distribution programs. In FY14, scout troops, Stream Teams, school groups, conservation groups, and communities received trees through this program for projects in both urban and rural areas. The agreement also provided support for the distribution of shortleaf pine and redbud seedlings to more than 95,500 fourth-grade students statewide. A total of 249,000 free trees were provided through the Trees for Tomorrow program.

## **Outstanding Forest Stewards**

The Department and the Missouri Community Forestry Council jointly sponsored the Missouri Arbor Awards of Excellence. This program recognizes those throughout the state who act as good stewards of tree resources. Award categories include municipalities/governments, organizations, individuals and businesses. In fiscal year 2014, awards went to Brad Busekrus, Brightside St. Louis, and the city of Kansas City. Award recipients were recognized at the Missouri Community Forestry Council's annual conference held in Jefferson City in March 2014.

## **Conservation Volunteers**

Volunteers are important Department partners. Volunteer highlights in fiscal year 2014 include:

- **Hunter Education:** Volunteer instructors contributed more 12,000 hours delivering more than 1,100 hunter education classes in Missouri, certifying over 20,000 students.

- **Stream Teams:** Missouri had 3,905 active Stream Teams statewide in calendar year 2013. Four hundred and nine members were trained to be volunteer water quality monitors. Volunteers donated 100,460 hours and their accomplishments included 1,029 water-quality monitoring trips, removing 1,752 tons of trash, planting 23,956 trees, and stenciling 1,925 storm drains.
- **Missouri Master Naturalist:** Through 12 chapters, Master Naturalist volunteers donated more than 53,000 hours to conservation projects. Accomplishments included flora and fauna monitoring, tree planting, native seed collection, invasive species removal, trail construction, habitat restoration, and outreach and education. Volunteers collectively participated in more than 10,000 hours of advanced training. Eight initial training courses were conducted resulting in 198 new volunteers joining the program.
- **Facilities:** Volunteers at the Department's interpretive sites, nature centers, and staffed shooting ranges contributed in excess of 60,000 hours of service assisting staff with programs, visitor relations, and area maintenance.
- **Protection Volunteers:** Missouri has 97 Protection volunteers who donated 7,506 hours this past year assisting conservation agents. Protection volunteers help with everything from hunter education classes, outdoor skills programs and wildlife surveys to radio programs, nuisance wildlife calls, and special enforcement patrols.
- **Missouri Forestkeepers Network:** The Missouri Forestkeepers Network is a volunteer group interested in forests and forest monitoring. More than 2,600 individuals, groups, and organizations were enrolled in the program in fiscal year 2014. Members planted more than 21,000 trees, documented the location of butternut trees, worked with outdoor classrooms and participated in youth oriented activities, and spent almost 1,000 hours treating unwanted vegetation. These activities benefit several Department programs. The Heritage Woods program is managed through the Missouri Forestkeepers Network and was promoted to people who own smaller parcels of land. The availability of the mobile application MO Woods, which allows landowners to conduct a basic assessment of their forest, was publicized. To date, the application has been downloaded 1,436 times.
- **Volunteers Teach Fishing Skills:** Fishing is a great way for kids and families to have fun outdoors, discover nature, and make happy memories

together. Department staff trained experienced anglers from all around the state to help others learn to fish through its free Discover Nature — Fishing Program. This new statewide program provides a series of four separate lessons to help kids and families gain skills and confidence to go fishing on their own. Lessons include: Equipment, Casting, and Proper Fish Handling; How to Rig a Pole and Bait a Hook; Aquatic Biology, Ecology, and Conservation; and Fishing with Lures. Each of the four, two-hour lessons was followed by hands-on fishing where participants put their newly learned skills to work. Equipment and bait is provided for participant use. Volunteers teach a single lesson or multiple lessons. Classes are offered throughout the year on a regional basis.

### Forest Management for Landowners

The Department provided forest management onsite technical assistance to 1,715 landowners throughout the state, impacting 114,485 acres. Many of these onsite visits resulted in a written management plan. A total of 300 plans covering 27,828 acres were written. In addition, 77 private land timber sales were marked and 232 landowners were referred to a forest consultant.

### Logger/Landowner Grant

In fiscal year 2010, the Natural Resource Conservation Service awarded the Department a National Conservation Innovation Grant to establish a trial cost-share program supporting a partnership between loggers and landowners. Loggers of approved projects are paid \$10 to \$20 per acre to implement best management practices and landowners receive \$5 per acre. Splitting the incentive gives the logger ownership of the responsibility for establishing erosion prevention measures on timber sales and gives the landowner responsibility for maintenance.

To participate, loggers must be professionally trained loggers or attend a Department Best Management Practices (BMP) class. The grant was completed and closed in fiscal year 2014. Throughout the life of the grant, 7,977 acres of private land timber sales were impacted, funding the implementation of best management practices on 81 projects, providing \$39,884.40 in cost share to landowners and \$153,433.50 in cost share to loggers to put these practices in place. In an effort to maintain the momentum to continue BMP implementation, a new cost-share practice was developed for funding through the Department's Landowner Assis-

tance Program. In fiscal year 2014, 28 projects were approved, covering 3,142 acres. These 28 projects were completed, providing \$65,515 in cost share to loggers and \$16,895 in cost share to landowners.

### **Logger of the Year**

The Department recognized Scott 'Greg' Stark of Birch Tree as Missouri's Logger of the Year for practicing sustainable forest management. Each year foresters nominate loggers that excel in their profession. The State Logger of the Year award is chosen by a panel representing the Department, the Missouri Consulting Foresters Association, the Missouri Loggers Council, and the Missouri Forest Products Association (MFPA). The logger must complete the MFPA and Department-sponsored Professional Timber Harvester's Training Program. Warren Gerlt from Fayette and Jeff Skaggs from Piedmont were selected as regional recipients of the Logger of the Year award for 2014. To be considered for the award, loggers must meet the following criteria: a.) Must be practicing sustainable forest management, have good forest product utilization, and are implementing best management practices; b.) Must have low residual tree damage on their harvests; and c.) Must be practicing safe work habits and preferably using all the safety equipment.

### **Trees Work Campaign Launched**

The Department was in full swing in fiscal year 2014 implementing the Trees Work campaign to increase awareness of the benefits trees provide. Staff produced a series of six radio ads in partnership with actor John Goodman and ran the ads on nine radio stations and on Pandora (online radio), 5,000 "Trees Work for Your Health" seed packets were distributed at a conservation-themed marathon, 120,000 Trees Work tree tags were hung on seedlings at nurseries, print ads were run in 11 publications, Trees Work was promoted through the *treeswork.org* website and social media, two new posters were developed and 300 were distributed for public display. Staff conducted many programs around the state related to the benefits our trees and forests provide. In the spring, a state-wide contest to finish the phrase "Without trees . . ." was hosted, which received 1,326 entries. "Without trees . . . we'd be up a creek without a paddle" was the winning entry, and it was made into a poster. Nine focus groups were conducted around the state to help refine the messages of the campaign. In total, 97 people, 50 men, and 47 women participated. Overall, the majority of the

participants responded positively to the Trees Work campaign.

### **Landowner-Led Conservation Habitat Cooperatives**

The Department and nongovernment organizations continued development of 45 wildlife and habitat cooperatives through workshops and educational meetings in fiscal year 2014. Several cooperatives that have a focus on quality deer management (there are other co-op focuses as well such as all-wildlife, woodland, quail, and prairie) are finalizing data from their trail camera surveys, while many more are preparing to gather observational and harvest data for the 2014–15 hunting seasons.

Biologists from the National Wild Turkey Federation and Quail Forever plan to assist in the development of some of these cooperatives in an effort to meet the varying interests of landowners. Any newly formed cooperative will be tasked with establishing goals and objectives to solidify the group and aid the members in task management.

### **Listened to Missourians**

The Department believes that part of delivering excellent public service is to listen and understand what Missourians say about conservation programs and services. We conduct a variety of scientifically sound, unbiased, and representative efforts each year to understand public opinions, expectations, and recreation participation. This information guides decisions about regulations and forest, fish, and wildlife management.

In fiscal year 2014 there were 124 activities that involved 86,427 people. These included surveys, focus groups, open houses, comment periods, comments to the Regulations Committee, and contacts with the Department's ombudsman. Examples of efforts included the 2014 Statewide Angler Survey (mailed to 30,000 Missourians), a Black River Wall-eye survey, nine "Trees Work" focus groups, four logger focus groups, nine Protecting Missouri's White-tailed Deer public meetings, nine deer management open houses, an Upper Mississippi River waterfowl blind hunter poll, 47 area plan comment periods, and visitor surveys at Rockwoods Reservation, the Anita B. Gorman Conservation Discovery Center, and Twin Pines Conservation Education Center. In addition, the Department's Ombudsman and Missouri Conservationist magazine staff received a wide variety of questions and comments throughout the year.

## Engage Partners at all Levels

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### Department named “4-H Bridge Builder”

The Department was honored September 20, 2013 with the Missouri 4-H Foundation Nelson Trickey Bridge Builder Award which is presented to individuals or organizations for their exceptional service bridging youth and community. The Department's work with Missouri youth began in 1939 with Missouri Nature Knights, an education initiative adopted by 4-H clubs, which promoted activities to restore wildlife habitat. The Department's support continues today in all 4-H outdoor education and natural resource programs.

### Taneycomo Vegetation Treatment

Department staff worked with Empire Electric Cooperative and the City of Rockaway Beach on a plan to treat nuisance aquatic vegetation in several areas of Lake Taneycomo. Rockaway Beach raised money from private donations. Those funds were used by Empire Electric to hire a private contractor to treat the vegetation. Curlyleaf pondweed, coontail, and elodea were the primary species causing the most problems. The vegetation was sprayed with a combination of herbicides. The treatments were very successful. Two weeks after treatment the nuisance vegetation was almost completely gone. The success of these treatments enabled us to compose a set of guidelines to provide to private dock owners around the lake experiencing similar problems with nuisance aquatic vegetation

### Platte Landing Park River Access

A partnership between the Department and Platte County is helping boaters and anglers enjoy better access to the Missouri River in the Kansas City area. Platte County Parks and Recreation purchased land adjacent to their English Landing Park to provide a better location for the ramp. The Department provided funding for the entrance road, parking, and privy for the new ramp. The ramp will be a boost for fishing and boating on the river in the Kansas City metro area.

### City of Dexter Partners for Aeration System at Local Lake

Dexter City Lake experienced a fish kill as a result of low dissolved oxygen from a combination of high

nutrient loading, temperatures, and low volumes. The City of Dexter secured and operated a tractor-driven paddlewheel aerator that helped keep some fish alive through the fish kill event. A cooperative agreement was developed between the city and the Department to install an aeration system, splitting the cost between the two entities. The city agreed and constructed a secure aeration building complete with electrical wiring, timer, and exhaust fan. The Department purchased and installed a complete compressor driven aeration system. The system was installed and has prevented subsequent fish kills.

### Table Rock National Fish Habitat Initiative Project

Staff installed 74 new habitat structures in the Joe Bald and Coombs Ferry Park areas of Table Rock Lake. One thousand anchors were made for additional habitat structures in Table Rock Lake.

### Timber Price Trends Report

In cooperation with the Missouri Consulting Foresters Association, the Department continued to conduct quarterly surveys of timber prices throughout the state. Foresters voluntarily submit sale reports on both public and private land timber sales. The Department then uses these reports to compile region-wide timber price trends which are available to landowners, loggers, and other members of the forest products industry and the general public. These free publications help landowners when planning sales and preparing tax returns. In fiscal year 2014, the Department received more than 350 reports (by species) from 95 foresters.

The format for the Timber Price Report has recently changed. With input from the Missouri Consulting Foresters Association, the Missouri Forest Resource Advisory Council, Missouri Forest Products Association, the Missouri Department of Agriculture and other interested stakeholders, improvements were made to the report. These improvements make the report easier to understand and provide a more accurate representation of timber markets. Approximately 100 citizens receive a hard copy of the quarterly market report while more than 2,000 recipients receive it electronically. The report is also available on the Department's website.

### Little Otter Creek Reservoir Ecological Flows Task Force

The Little Otter Creek Reservoir Ecological Flows Task Force consists of staff from the Department



of Conservation, Missouri Department of Natural Resources, Natural Resources Conservation Service, and Olsson Associates (the consulting firm working with Caldwell County to design the dam). The goal of the task force is to develop a water management plan for the proposed Little Otter Creek Public Water Supply Reservoir that best meets the needs of aquatic resources within the operational constraints imposed by this reservoir. The task force meets on a regular basis and spent last year collecting baseline data on Little Otter Creek, including basin precipitation, flow dynamics, and channel structure.

### **Forest and Woodland Association of Missouri**

The Department partnered with the Forest and Woodland Association of Missouri (FWAM) to reach Missourians with the message that trees are important to our daily lives. In fiscal year 2014, FWAM assisted with the annual American Tree Farm Conference where attendees toured the farm of Bill and Margie Haage, the 2013 Missouri Tree Farmers of the Year. FWAM members hosted displays at the Missouri Small Farm Tradeshow, Timberfest in Doniphan, MO., and in at the St. Louis Earth Day event. A new pop-up backdrop was created for use at Earth Day and future events in urban sites. FWAM entered into a partnership with the Missouri Master Naturalists, the St. Charles County Parks and Recreation Department and others on an ongoing restoration project in Matson Hill Park. FWAM performed outreach, recruiting, registration, and organizing of a field day at the site in June. More than 70 individuals representing 50 different agencies and organizations attended the event.

### **Community Forestry Plans**

Community forestry work plans were completed in Brookfield, Neosho, Sheldon, and St. Martins. Plans for the courthouses in Iron, Lincoln, and Webster counties were also developed. These plans provide basic tree work and assessments, inventory of site, and planting recommendations with an accompanying map and written recommendations.

### **Shoal Creek Woodlands for Wildlife**

The Shoal Creek Woodlands for Wildlife project is a landscape-scale effort targeting approximately 63,000 acres in Crawford County, of which 83 percent is forested. A U.S. Forest Service grant was secured to advance this Advisory Committee's vision. To

facilitate providing cost share to land owners in this area, \$30,000 was provided to the Missouri Conservation Heritage Foundation early in fiscal year 2014. This funding was used to help five landowners managing 211 acres implement practices to improve forest health and water quality. Outreach was conducted to 50 landowners through a field day and 10 of those requested on-site assistance as a result. Six additional landowners have projects planned covering 103 acres. Practices include a reinforced stream crossing, stream bank stabilization, livestock exclusion, management plan preparation, and forest stand improvement.

### **Master Logger Certification**

The Department continues to support Missouri Master Logger Certification. To participate, loggers agree to uphold the standards set by the program. The Department awarded a \$50,000 grant to the Missouri Forest Products Association to aid the program. Loggers can be removed if they do not uphold the standards of the program. The eight-member certifying board is composed of a state legislator, a wildlife professional, a master logger from another state, a soil scientist, a representative from an environment organization, a private landowner, a forest industry representative, and the Department.

This program gives an outstanding logger an opportunity to be recognized and their skills showcased. It is hoped that when landowners seek to harvest timber they will use a Missouri Master Logger. The state's fish, forest, wildlife, soils, water, and air are better protected when harvesting is done by a certified logger. In fiscal year 2014, six new applicants were approved by the certifying board and three other applications are pending. Five Master Loggers were recertified bring the total to 13 certified Master Loggers in the state.

### **Missouri Brand for Forest Products**

The Department worked with the Missouri Forest Products Association, the Missouri Department of Agriculture, and other partners to develop strategies for branding Missouri forest products. The goal of the MissouriWood brand is to enhance the perception of Missouri wood products in the eyes of the consumer and establish a unique connection to the care and quality of forests grown in Missouri. Ultimately, such a connection will enhance retention of forest acres, encourage sustainable long term forest management, produce quality products, and create increased employment and revenue to Missouri

through a market and trade process for a strong Missouri forest future. In fiscal year 2014, multiple meetings were held with stakeholders, a model structure (including potential board members, an executive director job description, and cooperative agreement) was identified, brochures designed and produced, and the first phase of a website was developed. In addition, an urban wood utilization workshop was held in Springfield with more than 30 attendees from the arborist, wood processing, and wood worker fields attending.

### **County Aid Road Trust**

The County Aid Road Trust program enables the Department to cost share maintenance of roads accessing Department areas with 39 counties and other local governments statewide. The program provided about \$530,000 statewide last fiscal year.

### **Monitoring Forest Health**

The Forest Health Program is an effort among the Department and other state and federal agencies to monitor and evaluate forest health and provide information to Missourians. Primary threats to forest health in Missouri are oak decline, oak wilt, sporadic insect outbreaks, weather disturbances, and introductions of invasive species.

Forest Health staff also provide diagnostic services on all forms of forest insect and disease agents. Forest and pest management recommendations are provided to private landowners, forest managers, arborists, and the green industry. In fiscal year 2014, staff responded to 3,043 requests for assistance with forest health issues. Citizens are also encouraged to report suspected invasive pest infestations through a toll-free phone number, website, or an email. Forest Health staff investigate these reports.

Forest Health staff further cooperated with state and federal partners in 2014 to develop the Missouri Invasive Forest Pest Plan, which outlines combined state and federal responses to invasive forest insects and diseases in Missouri.

- **Gypsy Moth:** The Department and cooperating state and federal agencies completed the annual gypsy moth trapping survey in August 2013 with five moths captured statewide. The Department monitored nearly 3,000 traps in St. Louis, Ozark, and Southeast regions and provided GIS and data management services for all agencies participating in the survey. Missouri has no known reproducing gypsy moth populations.

- **Thousand Cankers Disease of Black Walnut:**

The Department continued monitoring and outreach efforts for thousand cankers disease (TCD) of black walnut supported by two grants from U.S. Forest Service State and Private Forestry. In 2014, staff provided outreach efforts including an Internet ad campaign and magazine ads. In 15 counties, staff conducted more than 150 visual surveys for TCD and placed more than 120 traps at high-risk locations for the insect that spreads the disease. No TCD was detected.

Department staff worked with the Missouri Department of Agriculture to complete a draft of the TCD Action Plan for public comment.

The Department provided funding for University of Missouri research to evaluate black walnut germplasm for possible resistance to TCD.

- **Emerald Ash Borer:** Populations of the emerald ash borer (EAB) had been detected in 11 Missouri counties by June 2014. EAB was detected for the first time in the St. Louis area in May. A concerned citizen reported the suspected infestation in St. Charles County to Department foresters, who investigated with assistance of staff from Missouri Department of Agriculture (MDA). EAB populations are also known to be present in the Kansas City area (Clay, Jackson, and Platte counties), south central Missouri (Pulaski County), and southeastern Missouri (Butler, Bollinger, Madison, Perry, Reynolds, and Wayne counties). The annual EAB trapping survey was conducted by MDA and U.S. Department of Agriculture (USDA) in summer 2013. In response to increasing EAB detections, MDA and USDA expanded EAB quarantines statewide in late 2013. The Department continued serving as a gateway for Missourians to report suspected invasive forest pest infestations through phone and Web-based reporting systems.

- **Rapid White Oak Mortality:** Significant rapid white oak mortality (RWOM) has been reported in Central, Ozark, Southeast, and St. Louis regions. A grant from the USDA Forest Service National Evaluation Monitoring Program to study the problem was awarded to the University of Missouri with match funding from the Department. Research began in fiscal year 2014 and will be completed in fiscal year 2015. The goal of the work is to better understand potential causes of RWOM by developing a database of RWOM distribution and associated site characteristics and by characterizing insect and fungal pathogens associated with RWOM. In fiscal year 2014, The Forest Health pro-

gram staff and other employees assisted with the research effort by providing information, advice, and ground surveys of decline and mortality in affected regions.

## **Fire-Suppression Training**

The Department supports volunteer fire departments in many ways. One way is by providing annual wildland fire-suppression training to fire departments throughout the state. We conducted 38 sessions and trained more than 868 local firefighters in fire behavior, suppression techniques, and safety at no cost to the fire departments or the volunteers. In addition, we also provide instructors and logistical support for the Midwest Wildfire Training Academy held in Jefferson City each year. This academy draws thousands of participants from throughout the state and the Midwest.

## **Volunteer Fire Departments**

The Department, in cooperation with the U. S. Forest Service, provided \$386,938 in grants to 183 volunteer fire departments. Rural fire departments provide the first line of defense against wildfire. Those serving populations smaller than 10,000 people can participate. These grants help fund protective clothing, equipment, and training.

Equipment was also provided to fire departments through two federal programs. Through the Federal Excess Property Program we obtained equipment valued at \$16,251. Through the Fire Fighter Program we obtained equipment valued at \$3,337,661. Coordination of these programs is managed by the Department's Rural Forest Fire Equipment Center located in Lebanon. The Department's volunteer fire department assistance program has assigned more than \$80 million in total value of equipment to volunteer fire departments since its inception in 1951.

## **Interstate Wildlife Violator Compact**

Missouri participates in the Interstate Wildlife Violator Compact. The compact — 43 state wildlife agencies — agrees to reciprocally honor revocations/suspensions of hunting, fishing, and trapping privileges for wildlife-related violations.

During fiscal year 2014, 2,662 people from other states had their privileges revoked in Missouri through the compact. The Missouri Conservation Commission revoked an additional 210 and submitted them to the compact. Participation in the compact also benefits Missourians who travel to other

member states for hunting and fishing activities. If found in violation, they may be given the opportunity to resolve the citation by mail rather than being required to post a bond before leaving the member state. They are subject to revocation by all states in the compact, if the citation is ignored.

## **Share the Harvest**

Conservation agents coordinate and support the Share the Harvest program with the Conservation Federation of Missouri, local charitable organizations, and local meat processors. In 2013, approximately 4,489 hunters donated 227,358 pounds of venison to less-fortunate Missourians. Since the start of the program, more than 3 million pounds of deer meat have been donated to Missouri citizens. Hunters who donate an entire deer may receive a \$60 reduction in the processing price from the Conservation Federation of Missouri. In some cases, local organizations provide additional funds for processing so there is no cost to hunters who donate deer. Hunters also may donate part of their deer to the Share the Harvest program.

## **Operation Game Thief/Forest Arson**

Operation Game Thief/Forest Arson continues to help catch wildlife poachers and forest arsonists. The programs allow anonymous callers to report violations, and callers are eligible for rewards if arrests are made from their calls. Last year Operation Game Thief (OGT) led to 289 convictions from 981 telephone calls. Conservation agents investigate each violation reported. In calendar year 2013, \$12,900 in reward money was paid to callers.

## **Timber Harvester Training**

The Department works with Missouri's forest products industry to monitor the use of our state's forest resource. The Missouri Forest Products Association and the Department sponsor the Professional Timber Harvester (PTH) program. PTH is a logger training course about forest management principles which introduces new techniques and concepts, and strives to enhance safety. Nine workshops were held across the state training 92 loggers in fiscal year 2014. There are a total of 410 loggers in the state who have attended this training and are current on their continuing education requirements. A Monitoring and Evaluation project was completed in fiscal year 2014 to determine the effectiveness of PTH program. This review included a hard look at implementation of Best Management Practices

following timber sales on private land. Five focus group meetings were held across the state attended by approximately 50 participants.

### **Stream Stewardship Trust Fund**

The Stream Stewardship Trust Fund is an in-lieu fee program created to restore, enhance, and/or protect stream systems and associated riparian habitats. The program and funds are administered by the Missouri Conservation Heritage Foundation, and the Department applies for grants to use toward protecting stream resources. In fiscal year 2014, one project costing \$54,702 was approved to protect Missouri's stream and riparian corridors.

### **Joplin Tornado Assistance**

After the destructive tornado that tore through the communities of Joplin and Duquesne in May 2011, the Department secured special funding from the U.S. Forest Service to help both towns address tree issues. Part of the funding from this grant was used to hire an hourly employee to serve as a Tree Recovery Coordinator to work with communities, citizens, and volunteer groups. In fiscal year 2014, the Coordinator completed this grant. During the two-year life of the grant the Coordinator worked with the City of Joplin facilitating the planting of more than 12,207 trees, enabling the distribution of hundreds more trees to homeowners, coordinating the work of more than 3,662 volunteers, providing 22,435 hours of assistance, providing input on revisions to various city ordinances that impact trees, and coordinating numerous offers of financial assistance totaling more than \$170,000 for tree restoration. Financial assistance was provided to Forest ReLeaf of Missouri allowing them to expand production in their tree nursery to provide thousands of trees to Joplin and Duquesne in fiscal year 2014.

### **Community Fisheries Assistance**

Through the Community Assistance Program and the closely related Corporate and Agency Partnership Program, the Department enters into agreements (usually 25-year) with cities, counties, state and federal agencies, businesses, foundations, schools, and colleges. Under these agreements, the Department provides fisheries management at existing lakes and ponds and cooperatively develops and maintains facilities for anglers and boaters at lake and stream areas. Currently, there are agreements with 118 partners for the cooperative management

of 166 public lakes, 43 stream-access areas, four lake-access areas, and 10 aquatic education ponds.

The Department and North Central Missouri College constructed fishing access facilities for aquatic resource education at Barton Campus Pond. Agreements were renewed with the cities of Savannah (Savannah City Lake), California (Proctor Park Lake), and Carthage (Kellogg Lake) for cooperative management of their lakes; an agreement was renewed with Chillicothe R-II School District for cooperative development and management of Litton Center Pond for aquatic resource education; and another was renewed with Valley Park for cooperative development and management of Meramec Landing, a boating and fishing access on the Meramec River. The Department entered into a new agreement with Moscow Mills for cooperative development and management of a canoe access on the Cuivre River.

### **Firewise Communities**

Within the Fire Protection Districts of Redings Mill, Carthage, Lake Ozark, Southwest Camden County, and Pontiac, 24 communities were recognized nationally as Firewise Communities USA in fiscal year 2014. To qualify as a Firewise Communities USA, a community must meet these four standards: 1) Complete a community assessment and create a plan, 2) Form a Firewise Board, 3) Hold a Firewise Day event, and 4) Invest a minimum of \$2 per capita on local wildfire mitigation projects. Firewise Communities USA is a National Fire Protection Association program co-sponsored by the U. S. Forest Service, the U. S. Department of Interior, and the National Association of State Foresters. Their goal is to promote community use of technologies, policies, and practices that minimize the loss of life and property to wildfire, independent of fire-fighting efforts.

### **Community Tree Care**

The Tree Resource Improvement and Maintenance (TRIM) cost-share program continues to receive interest from communities of all sizes across the state. In FY14, we received 47 applications. Over \$324,000 Department dollars were spent funding the 31 best applications. Twenty-seven of the successful applicants receive 60-75 percent of total project cost up to \$10,000. These funds were used primarily to complete tree inventory projects, plant trees, educate Missourians about trees and their benefits, and complete tree pruning and removal. Four of the applicants selected for funding received large grants

of up to \$25,000 for inventory and a special mapping project through the Mid America Regional Council. In fiscal year 2014, applicants matched the Department contribution on average by 42 percent, providing \$231,631 in local match.

### **Forest Management Guidelines**

During fiscal year 2013–2014, the Department worked in cooperation with members of various organizations from the Missouri Forest Resources Advisory Council (MOFRAC) to develop the Missouri Forest Management Guidelines. Five technical teams, which included over 30 subject matter experts representing 16 different organizations, institutions, and agencies met to develop content for this guide. Drawing on input from this diverse group of stakeholders, these voluntary guidelines describe the forest best management practices that are most likely to achieve a sustainable forest resource for Missouri citizens to value and appreciate. The final document was completed in fiscal year 2014. These guidelines are peer reviewed, based on the best available scientific research, and were presented for public comment to ensure that they achieve social, environmental, and economic objectives for sustainability.

### **Archery in the Schools**

Missouri National Archery in the Schools (MoNASP) is coordinated through the Missouri Department of Conservation and the Conservation Federation of Missouri in partnership with 443 participating schools and numerous supporting organizations throughout the state. MoNASP is an affiliate of the National Archery in the Schools Program and promotes education, self-esteem, and physical activity through the sport of archery to more than 125,000 Missouri students. MoNASP saw unprecedented growth in 2014. In the first seven months of the year, 123 schools were added. By comparison, 63 schools were added in all of 2013.

The sixth annual MoNASP state tournament, held March 2014, drew 1,344 student archers in grades 4–12 from 82 schools across the state and more than 7,500 observers and supporters.

### **River Basin Management**

The Department participates in multiple interstate technical working groups and restoration program coordinating committees to implement ecosystem-based management of the Missouri, Mississippi, and White rivers and their floodplains. The over-

all focus is on conserving forest, fish, and wildlife resources and enhancing recreation opportunities, while working within a multiple-use system that includes transportation, water supply, agriculture, and energy development.

Through the U.S. Army Corps of Engineers' Upper Mississippi River Restoration — Environmental Management Program, the wetland complexes at Ted Shanks Conservation Area are being updated and enhanced. Work progresses on the Lower Mississippi River Resource Assessment, a multiple partner effort to identify needs for river management, habitat improvement, and river-related recreation.

A Department study of larval and young of the year sturgeon began in fiscal year 2014 and will establish reference conditions for the best habitats available for these fish on the Missouri River. The study is funded through a partnership with the U.S. Army Corps of Engineers, which also supports the Department's management of more than 18,000 acres along the Missouri River.

### **Promoting Alternate Energy**

The Department is participating in an industry-supported, multi-state effort with the U.S. Fish and Wildlife Service to develop a habitat conservation plan to address wind energy development and endangered species. The plan would allow for timely processing of wind energy development projects while addressing and minimizing impacts to sensitive resources.

The Department is engaged with private interests and researchers, advising them on practices for grassland bioenergy to minimize impacts to wildlife and improve habitat at bioenergy sites in Missouri. The goal is to use the diversity, resiliency, and structure of tallgrass prairie as the model for bioenergy production. The Department teamed with the University of Missouri to develop a multi-page brochure on best management practices for grassland bioenergy projects in 2014.

### **MU Research Farms Partnership**

• **University of Missouri Bradford Research and Extension Center:** The Department continues to partner with Bradford Farm Research and Extension Center with the addition of a natural resources manager cooperative position that coordinates habitat demonstrations, events, and research on integration of forest, fish, and wildlife conservation with agricultural practices and the annual Quail and Pollinator Field Day, where pollinator and bio-fuel research with native plants are highlights.



- **University of Missouri Turfgrass Farm:** The Department partnered with MU to prepare a Conservation Master Plan for the Turfgrass Research Farm in Columbia. An accompanying Land Use Decision Matrix will help with prioritizing potential projects based on the objectives of both MU and the Department.
- **University of Missouri Forage Systems Research Center:** The Department coordinated and funded the development of a forest stewardship plan for the Center. Implementation of 40 acres of timber stand improvement and a timber sale are in-progress. Collaboration to develop a 319 mini-grant proposal could result in stream protection and riparian habitat improvement if funded, in fiscal year 2015.
- **University of Missouri Graves-Chapple Research Center:** The Department continues to partner with the loess hills prairie restoration demonstration project at the Center. Woody-cover control on 4 acres was completed. Prairie restoration continued on two adjacent private landowners' loess hills including a prescribed burn coordinated by the USFWS. The project was showcased at a landowner field day held at the farm.
- **University of Missouri Southwest Research Center:** The Department continues our long-standing partnership at the Center whereby a host of demonstrations which integrate forest, fish, and wildlife conservation with traditional Southwest Missouri farm management practices are showcased. Wildlife-friendly grassland management, windbreaks, and wetland demonstrations are profiled.

## Agriculture Conferences

To connect with key Missouri agriculture partners, leaders, and business, the Department staffed information booths at all major agriculture conferences and trade shows held in the state, including: Missouri Farm Bureau Annual Conference, Governor's Conference on Agriculture, Agriculture Business Council of Kansas City, Soil and Water Conservation Districts Annual Training Conference, Missouri State Fair, Missouri Pork Association Annual Conference, MO-AG Annual Conference, and the Missouri Cattlemen's Association Convention.

## Community Tree Care Recognized

In partnership with the National Arbor Day Foundation and National Association of State Foresters, the Department recognized 85 municipalities as Tree City USA communities. To receive Tree City USA certification, communities must meet these four

standards: 1) Have a tree board or forestry department, 2) Adopt an ordinance that outlines how trees on public property will be cared for, 3) Spend a minimum of \$2 per capita on tree management, and 4) Celebrate Arbor Day. Most communities exceeded these requirements with an average of \$7.33 per capita spent on tree care in calendar year 2013, up from \$5.94 in 2012. More than 43 percent of Missourians live in a Tree City USA community. Communities participating in this program range in size from Kansas City (population 441,545) to Augusta (population 225). Fifteen communities initiated or significantly improved existing tree programs, earning a Tree City USA Growth Award. Resource and urban foresters provide these communities with technical assistance and distribute the recognition materials at Arbor Day events, City Council meetings, or similar public events to provide recognition of Department assistance and raise awareness in the community.

## Natural Heritage Review

The Endangered Species Act requires projects seeking federal funds or permits to document efforts regarding rare species, and this documentation is often accomplished by a request for a Natural Heritage Review. In fiscal year 2014, 595 review requests were completed.

The review provides information on the presence or absence of rare species within a specified project area. The primary source of information for the review is obtained from the Missouri Natural Heritage Database (MONHD), the warehouse for the Missouri Natural Heritage Program. The MONHD compiles information from many state, federal, academic, and private sector experts, and then provides the most comprehensive set of species and communities of conservation concern.

## Tree Campus USA

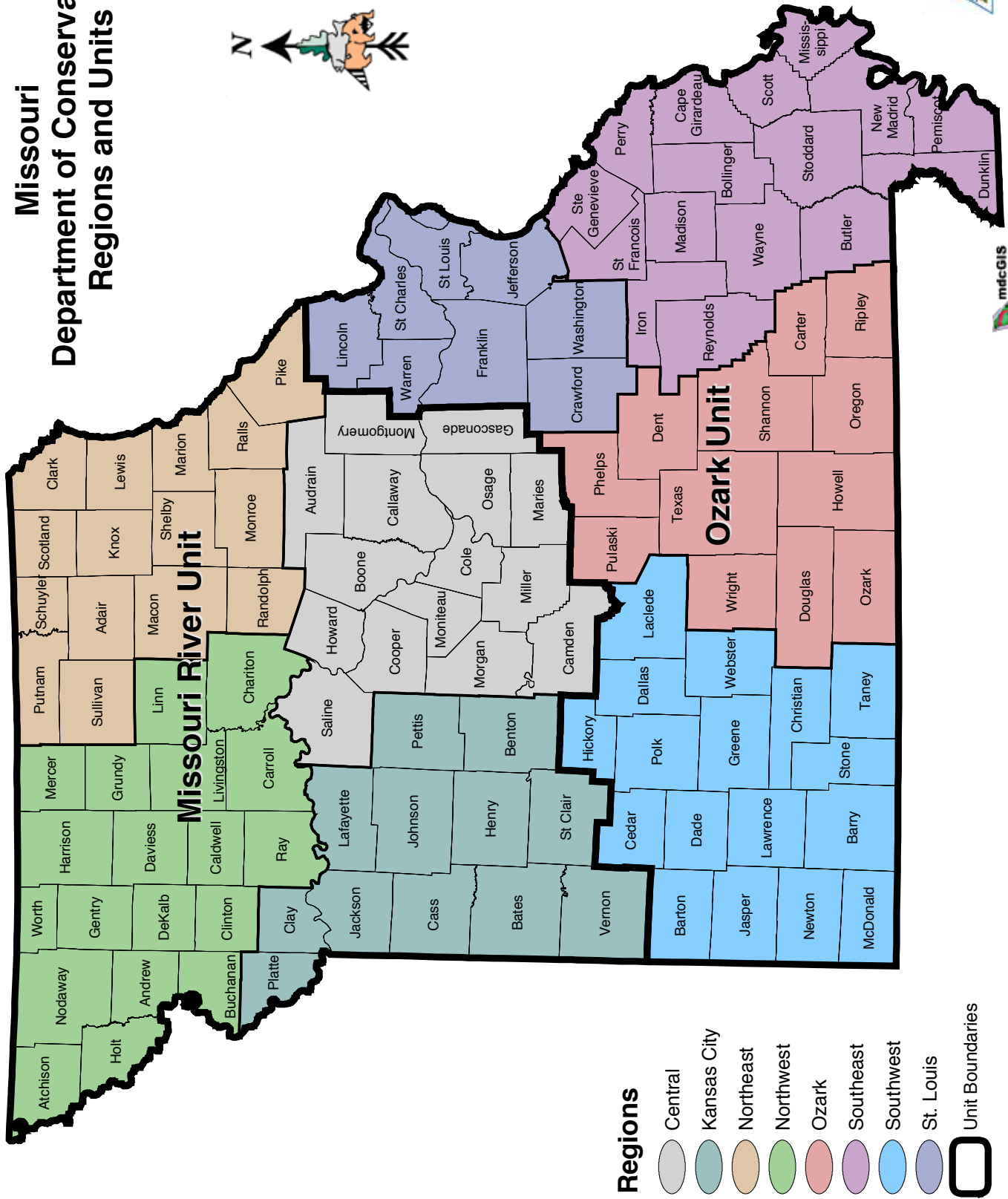
The Department certified seven Tree Campus USA colleges for work in calendar year 2013. Hannibal-LaGrange University and Truman State University joined Missouri State University, St. Louis University, St. Charles Community College, Washington University, and William Woods University in meeting the Arbor Day Foundation's five standards for certification. Those standards are: 1) Tree Advisory committee, 2) Tree care plan, 3) Tree program with dedicated annual expenditures, 4) Observe Arbor Day, and 5) Complete a service learning project that engages the students in tree management. The seven campuses spent \$415,203 on tree care where a total of 53,525 students are enrolled.

# Organization and Administrative Descriptions

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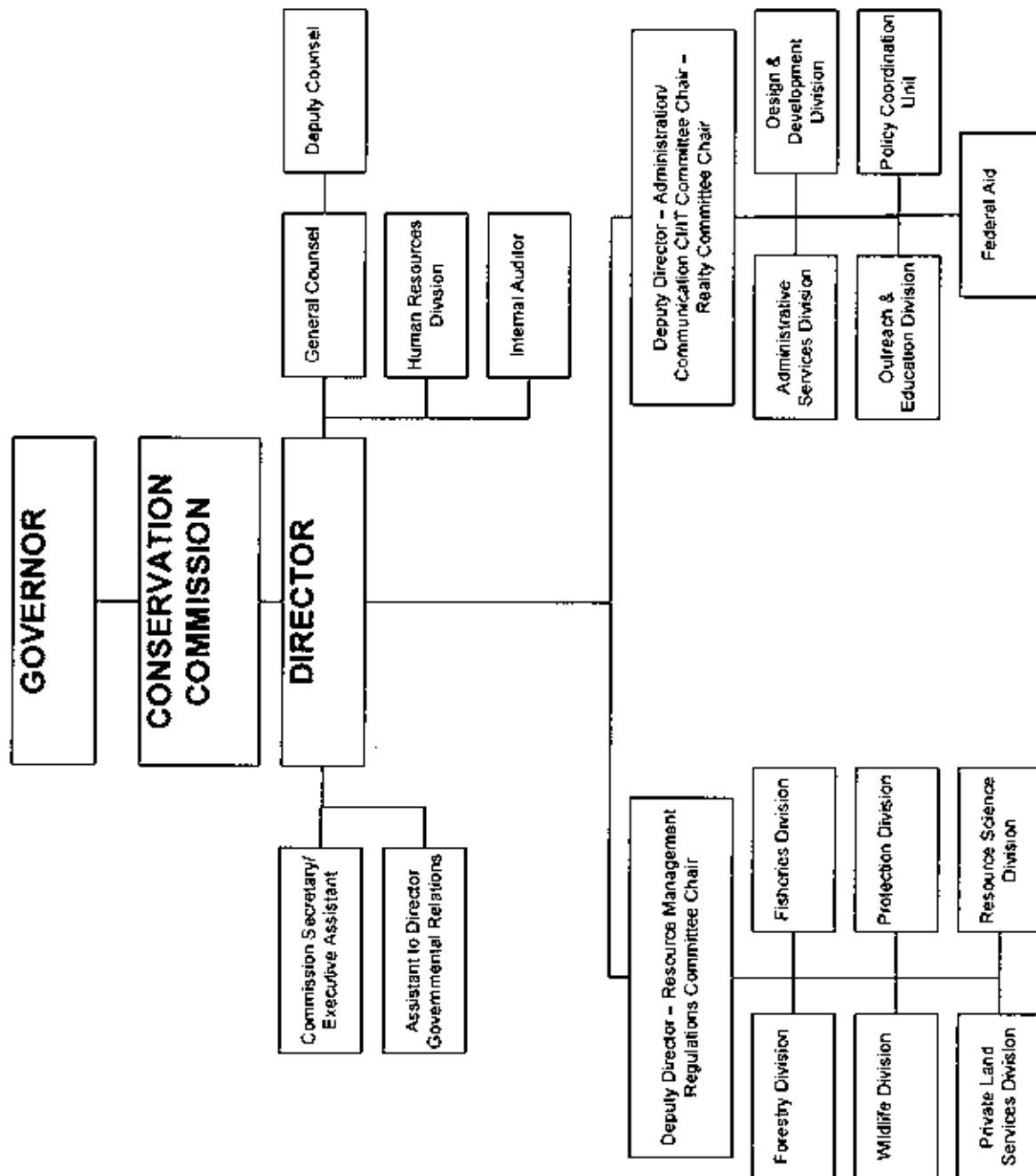
- ▲ Department Regions and Units
- ▲ Department Organizational Chart
- ▲ Director's Office and Department Divisions

# Missouri Department of Conservation Regions and Units

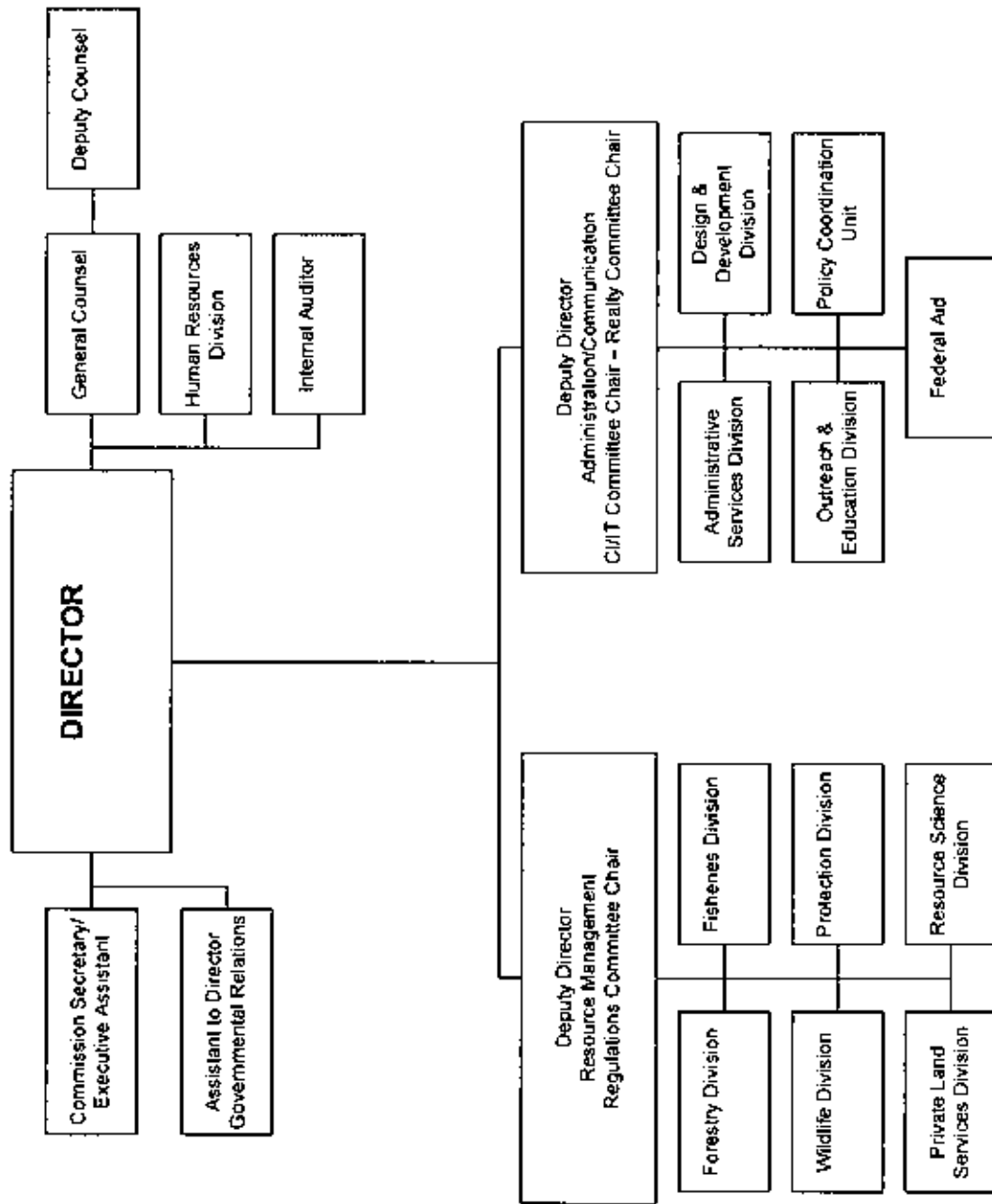


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# MISSOURI DEPARTMENT OF CONSERVATION



# Director's Office





# Director's Office

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## **Robert L. Ziehmer, Director**

Director Ziehmer, appointed by the Conservation Commission, directs all programs and activities of the Department of Conservation and directly oversees two deputy directors, an assistant to the director, the general counsel, an internal auditor, and the Human Resources Division chief.

## **Tom Draper, Deputy Director for Resource Management**

Deputy Director Tom Draper is responsible for the divisions of Fisheries, Forestry, Wildlife, Private Land Services, Protection, and Resource Science. He also chairs the Regulations Committee, a standing committee that recommends statewide regulations for the *Wildlife Code of Missouri* to the Conservation Commission.

## **Tim Ripperger, Deputy Director for Administration/Communication**

Deputy Director Tim Ripperger is responsible for the Administrative Services Division, Design and Development Division, Outreach and Education Division, the Policy Coordination Unit, and the Federal Aid Unit. He chairs the Capital Improvements and Information Technology Committee and the Realty Committee.

## **Aaron Jeffries, Assistant to Director**

The assistant to director is responsible for governmental liaison with the state legislature, other elected officials, state agencies in the executive branch, and the governor's office staff. He also represents the director on the Land Reclamation Commission.

## **Jennifer Frazier, General Counsel**

The general counsel is legal advisor for the Conservation Commission, the director, and department staff. She oversees the deputy counsel, who manages Realty Services and the Grants and Donations program.

## **Lisa Wehmeyer, Internal Auditor**

The internal auditor provides independent audit of Department operations, policies, procedures, records and compliance with laws and regulations to ensure effectiveness and accountability. She also serves as the Custodian of Records and Hearing Officer.

## **Policy Coordination Unit**

The Policy Coordination Unit serves the director's office and department staff by managing department, statewide, and interagency issues. Examples of coordination include:

- Coordinating environmental and resource management policy issues;
- Representing public fish, forest, and wildlife interests by coordinating and providing comments and recommendations to federal and other agencies authorized to conduct environmental reviews;
- Coordinating intra- and inter-state fish, forest, and wildlife resources associated with the Mississippi, Missouri, and White river basins;
- Coordinating multi-agency resource issues;
- Administering and coordinating department resource policies, procedures, and strategic planning;
- Coordinating public involvement activities and applying human dimensions of conservation information to Department issues, including social and economic facts, analyses, and citizen input opportunities.

## **Federal Aid**

Federal Aid staff administers the Department's federal assistance program and ensures compliance with federal rules and regulations. Besides the Wildlife and Sport Fish Restoration funding from the U.S. Fish and Wildlife Service (USFWS), the Department receives additional federal funds from other USFWS programs, the U.S. Forest Service, the U.S. Army Corps of Engineers, and the Natural Resource Conservation Service. The Department's Federal Aid staff annually administers approximately 115 grants, cooperative agreements, and contracts with federal agencies.

## **Realty Services**

Realty Services is responsible for handling the acquisition of land and land rights for the Department; resolving boundary, encroachment, trespass, or access issues; handling easement requests; maintaining records of real estate inventory and distributing annual in-lieu tax payments to Missouri counties.

# Regulations Committee

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## Who the Committee is:

*Wildlife Code* promulgation authority is provided to the Missouri Conservation Commission by the Missouri State Constitution. The Regulations Committee is appointed by the Director and is responsible for all rules in the *Wildlife Code*. Members include Division chiefs from Fisheries, Forestry, Wildlife, Protection, Resource Science, and Private Land Services divisions. The Department's General Counsel serves in an advisory role and the committee is chaired by the Deputy Director — Resource Management.

## What the Committee is:

The Department of Conservation's Regulations Committee makes recommendations to the Director and the Conservation Commission about modifying the regulations in the *Wildlife Code*. Those recommendations are based on information gathered from Missourians who have suggestions or complaints about wildlife management or regulations, hunting and fishing surveys, opinion polls, and public meetings across the state. The committee then seeks the expert opinion of the Department's research biologists and managers. Based on this information, the committee makes its recommendations to the Director.

## Major Challenges:

- Balancing the Department's responsibility to manage and protect Missouri's resources with needs and desires of partners and citizens
- Finding effective methods to manage wildlife disease in the state
- Limiting the spread of invasive species in the state

## How it meets the Commission's responsibility:

The Conservation Commission and the Department of Conservation have constitutional responsibility to protect and manage Missouri's forest, fish, and wildlife resources for the citizens of the state now and for the future. Regulations are established to best manage Missouri's valuable plant and animal communities, to provide equal opportunity for Missourian's to share and enjoy these resources, and to promote public safety. Three factors — biological impact, social concerns, and enforceability — come into play as a regulation develops.

## Summary of significant regulation changes during 2013–2014:

The Conservation Commission approved recommendations to:

- Set dates and limits for 2014 deer, turkey, and migratory bird seasons;
- Establish regulations for hunting and fishing on new conservation areas;
- Modify regulations for hunting and fishing on existing conservation areas and areas owned by other entities and managed by the Department of Conservation;
- Add two nonnative goby species to the list of prohibited species to help prevent their introduction and spread to Missouri waters;
- While limited opportunities exist, clarify regulations for a statewide pheasant hunting season;
- Clarify methods and permits required to hunt other wildlife during the youth and alternative methods portions of the fall firearms deer season;
- Identify specific affiliated groups of the Department of Conservation that are exempted from the Wildlife Collector's Permit rule while operating, conducting, or participating in a department-authorized project or program; and
- Allow the legal take of coyotes by hunters participating in the spring turkey season.

The Department follows established procedures to promulgate changes through the Secretary of State's office. As part of that process, and in order to make well-informed decisions, the Department collects public comments on all proposed changes.

# Capital Improvements and Information Technology Committee

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## Who the Committee is:

The committee is chaired by the Deputy Director. Administration and voting members include all ten Division Chiefs in the Department. Staff Support for the committee includes the federal aid coordinator, all division's support staff, and Policy Coordination.

## What the Committee is:

The Department of Conservation's Capital Improvements and Information Technology Committee, (CI/IT) has the responsibility and makes recommendations on developing annual budgets for capital improvements and technology expenditures. The CI/IT Committee makes recommendations on construction projects in all phases of Department responsibility. In addition, the committee ensures strategic analysis and long term planning of the Department's capital improvements and technology requirements for the future.

## Major Challenges:

- Balancing the Department's responsibility to manage and protect Missouri's natural resources with the needs and desires of Missouri's citizens in conjunction with the necessary infrastructure to support enjoying public lands and learning about conservation
- Maintaining aging infrastructure and planning for the future to meet the needs and desires of Missouri citizens

## 2013–2014 CI/IT Accomplishments

### Construction Improvements

- Completed eight major construction improvement projects with 75-percent Sportfish Restoration Grant reimbursements at MDC fish hatcheries.
- Completed design of the first phase of the Busch Range Renovation and advertised the project for bids.
- Completed feasibility study of the Shepherd of the Hills Conservation Center renovation.
- Completed CART agreements with 57 entities for placing 82,713 tons of rock on 504 miles of public roads leading to Conservation Areas.
- Completed trail renovation projects with D&D staff at Burr Oak Woods and Springfield Nature Centers.
- Completed headquarter renovation at Duck Creek Conservation Area.

### Information Technology Improvements

- **MO Hunting App:** The Department now offers a free mobile hunting application called MO Hunting, for both Android and Apple mobile devices. MO Hunting lets hunters, anglers, and trappers purchase permits directly from a mobile device, view previously purchased permits, allows hunters to Telecheck their harvests and they can also view their previous Telecheck harvest information.
- **Time Reporting System Replacement Software:** IntelliTime went live in January 2014.
- **Geographic Information Systems (GIS) Projects:** The Department completed several GIS projects including GIS Data Prioritization, GIS Road Mapping, and the GIS Repository. Over 40 base data layers were loaded into the GIS Repository, and work continues on a GIS Portal application to be able to search and view data in the GIS Repository.
- **Lands Management System and Infrastructure Asset Management System:** The Department awarded the contract to a company to complete the project.

# Realty Committee

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## **Who the Committee is:**

The Committee chairman is the Deputy Director. Administration and Division Chiefs with resource management responsibilities sit on the committee. Fisheries, Forestry, and Wildlife divisions are all voting members of the committee. Realty Services, Policy, and Administrative Services all provide assistance and support to the committee.

## **What the Committee is:**

The Realty Committee is responsible for developing strategic priorities for real estate activities, including acquisition, disposal, easements, right of ways, boundary issues, and all related real estate activities. The committee is responsible for reviewing and recommending land transactions throughout the Department.

## **Major Challenges:**

- Balancing the Department's responsibility to manage and protect Missouri's natural resources related to holding land in public trust.
- Protecting and preserving unique natural resource features, wildlife and fisheries habitats and populations through holding land in public trust.
- Providing Missouri citizens a readily available opportunity to explore, learn, and enjoy Missouri's natural resources through land held in public trust.

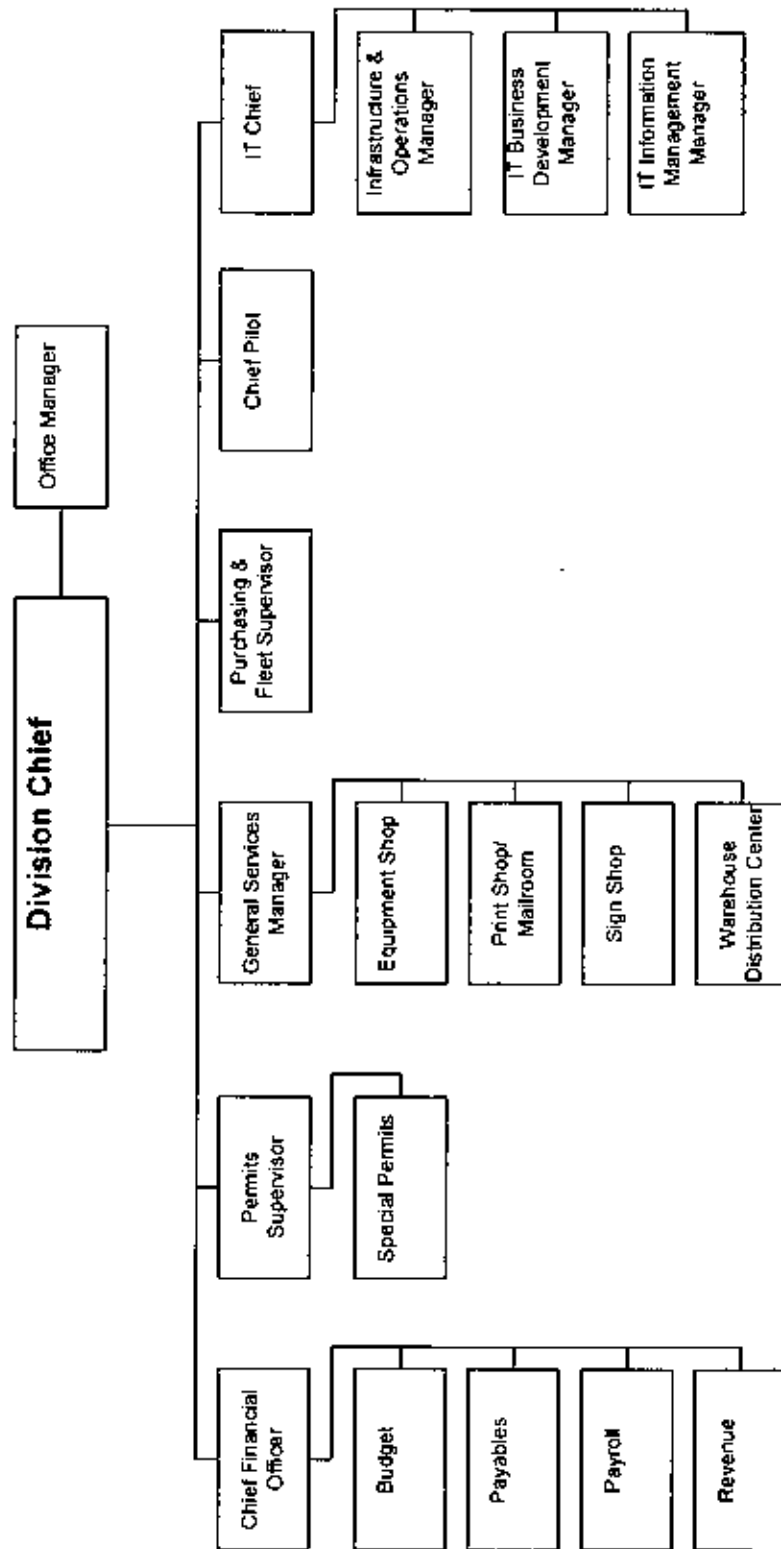
## **2013–2014 Realty Accomplishments**

- Purchased land in Shannon, Texas, Montgomery, Benton, and Christian counties that will protect land and water resources for appreciation and use by citizens to preserve Missouri's outdoor heritage through additional public access and provide additional outdoor recreation opportunities.
- Accepted donations from the Lawrence Matthew Schumacher estate and the Nature Conservancy.
- Established a conservation easement inspection and monitoring process.
- Disposed of three former office sites, (Sullivan, Brookfield, and Jefferson City) and two radio tower sites.





# Administrative Services Division



# Administrative Services Division

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## Goals

- Ensure sound financial accountability and transparency in all areas of operation
- Define and prioritize the investments of the Department to better manage our information (data) and technologies
- Provide information systems for managing all business, infrastructure, and resource programs
- Develop and execute a comprehensive maintenance program that includes scheduled replacement of equipment, preserving the overall value of these assets, circumventing costly repairs, and maintaining the lifespan of the assets
- Manage the implementation of e-permits

## Programs

**Financial Services:** This section provides a broad range of financial functions that support the Department's operations, while carefully managing the agency's assets, which have been entrusted to its care. Revenue projections and management, internal and executive budget management, financial analytical support, agricultural crop management, accounts payable, and the Department's payroll are the functions this unit oversees.

**Permit Services:** This unit is responsible for the distribution and management of point-of-sale automated permits, managed hunt/special permits, and commercial and landowner permits.

**Purchasing and Fleet Services:** This unit provides support for purchases of services and commodities, ensuring compliance with state purchasing laws and Department policies and procedures. It is also responsible for fixed-asset inventory and for ordering Department vehicles, seeking ways to improve and minimize the traveling performed with state vehicles.

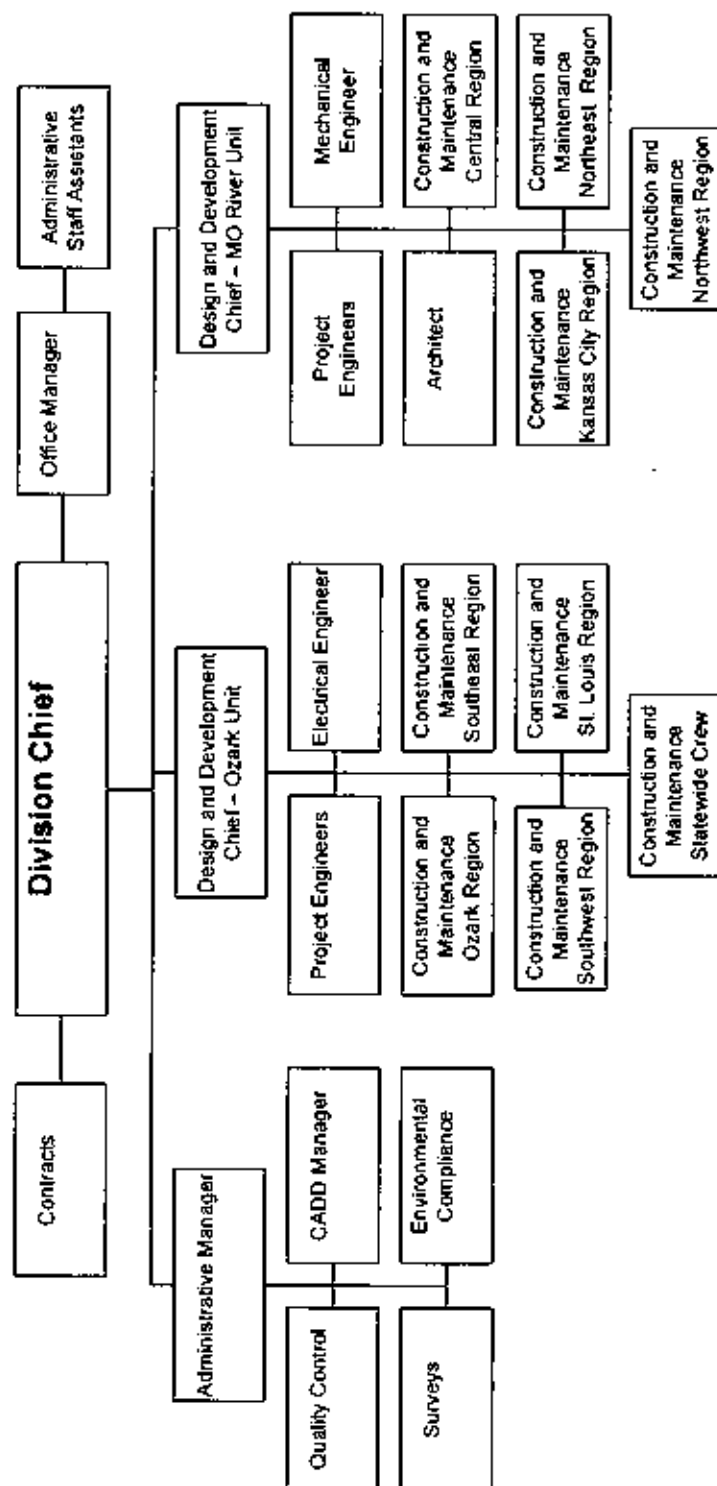
**Information Technology Services:** Better known as IT, this unit provides a wide range of statewide services including data, telecommunications and radio system management, help desk operations, network operations, software support, mobile device support, IT field support, and application development maintenance and support. In addition to these services, this unit is responsible for planning and implementing numerous strategic projects each year to improve agency operations and decision-making capabilities. These projects vary in size, complexity and duration, and cover the breadth of information technology, ranging from projects to replace aging IT equipment, to mobile application development, to implementing major agency systems such as those used for Hatcheries Information Management, Financial & Budgeting Management, Human Resources Management, GIS Data Management, Infrastructure Asset Management and numerous others.

**General Services:** This unit oversees equipment management and maintenance, sign production, distribution center operations, and printing and mailing functions.

**Flight Services:** This unit provides flight services for the Department resource functions such as wildlife management, fire control, and enforcement. Flight Services is responsible for the upkeep and maintenance of Department-owned aviation equipment.

Administrative Services Division makes every effort to achieve its mission by maintaining the financial integrity of the Department and ensuring prudent and wise use of its assets. We provide a broad range of high-quality support services to the Department's staff and programs. Not only do we lead and facilitate the effective use of technology in Department operations, but we also acquire and maintain Department equipment.

# Design and Development Division



# Design and Development Division

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## Goals

- Design and construct public-use facilities that are in harmony with the environment and enhance public use of our natural resources
- Provide sound conservation engineering assistance to other Department divisions and outside partners (communities, counties, and landowners)
- Provide high-quality maintenance to Department facilities and conservation areas
- Provide excellent and timely customer service

## Programs

**Engineering and Architecture:** The division provides engineering and architectural designs to implement capital improvement (CI) budget. Staff handles all aspects of design and development on projects, which may include performing investigations, conducting feasibility studies and/or environmental assessments, preparing design drawings with associated contract specifications, and construction management services. Types of projects include boat accesses, docks, roads, parking areas, office and storage buildings, fish hatcheries, fishing lakes and ponds, nature centers, shooting ranges, trails, and wetlands.

**Technical Support:** In addition to handling the CI projects, engineering staff also provides support and design expertise on non-capital improvement projects to Department divisions. Staff also provides design drawings and estimated quantities on the Department's repair and renovation projects; these efforts support our regional construction and maintenance superintendents and field resource staff.

**Surveys:** Employees in this unit are responsible for engineering and construction surveys and land boundary surveying for property boundary delineation.

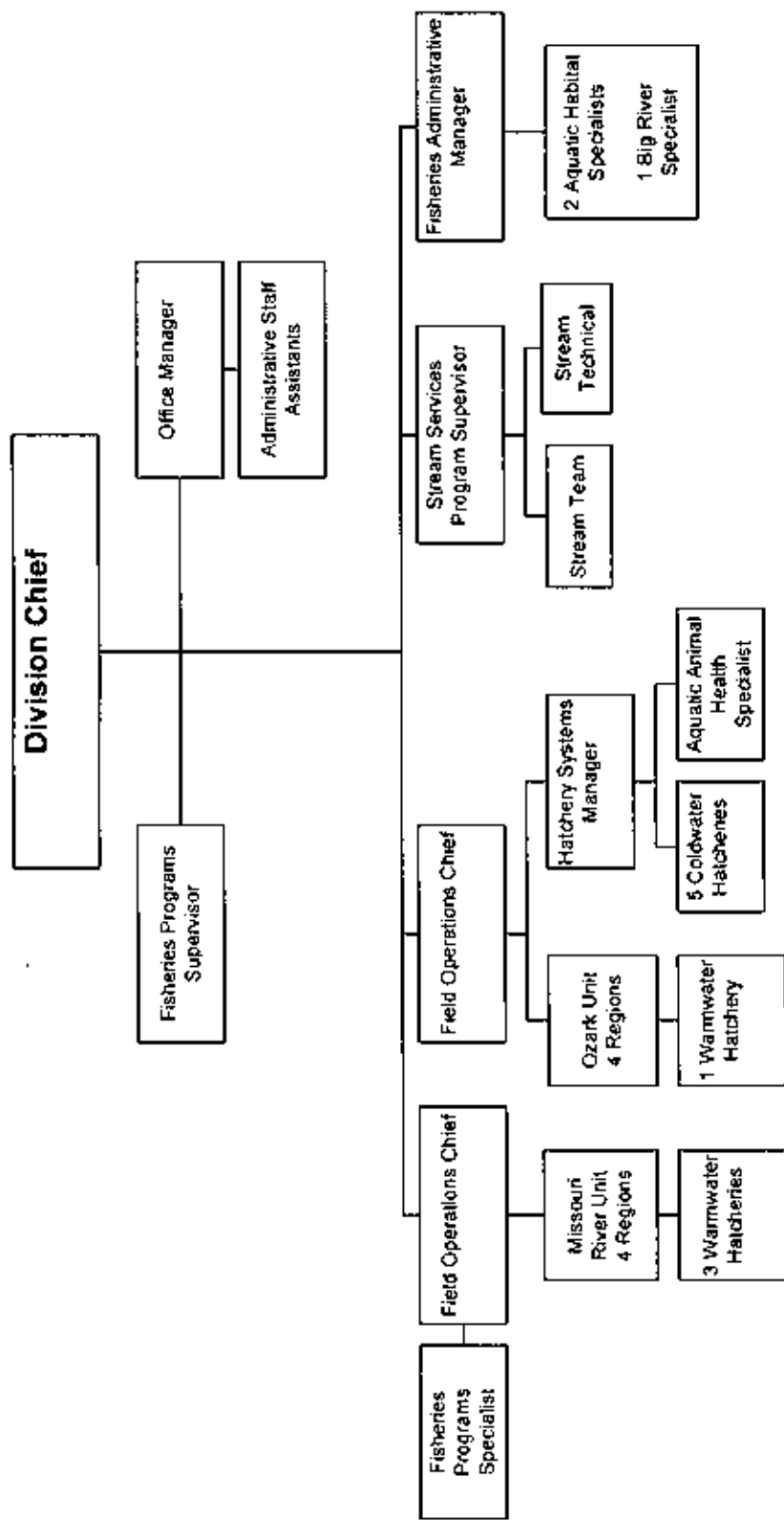
**Construction and Maintenance:** In each region, the division maintains superintendents, carpenters, equipment operators, and facility maintenance technicians. This staff is responsible for the construction of capital-improvement projects assigned to it, as well as small construction projects, and repair and renovation projects needed by other Department divisions. They provide facility maintenance to nature centers and regional offices, and perform routine maintenance at unstaffed department areas. Other maintenance tasks include mowing grass, grading parking areas and entry roads, cleaning boat ramps, and performing minor maintenance on privies, docks, and pavilions.

**County Aid Road Trust (CART):** The division administers the Department's CART Program, which involves cost sharing of roadway maintenance with counties and other governmental subdivisions to help ensure that roads accessing Department areas are properly maintained and provide adequate access.

**Environmental Compliance:** The division coordinates and obtains regulatory environmental permits and cultural clearances for all Department construction and management activities involving soil disturbance on public lands owned and managed by the Department.



# Fisheries Division



# Fisheries Division

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## Goals

- Maintain aquatic biodiversity
- Reduce the effects of aquatic nuisance species
- Provide enjoyable fishing trips
- Protect aquatic habitat
- Inform and educate the public about Missouri's aquatic resources

Missouri's aquatic resources are vast and diverse. Missouri has about 110,000 miles of fishable rivers and streams. The state also has about 780,000 acres of lakes (36 percent public). Each year, millions of people use and enjoy our waters, and fishing continues to be one of our most popular outdoor activities. About 22 percent of our residents aged 16 and older fish sometime during the year. During 2013, the Department sold 1,272,905 fishing permits and tags of all types. Fishing is big business and very important to the state's tourism industry.

## Programs

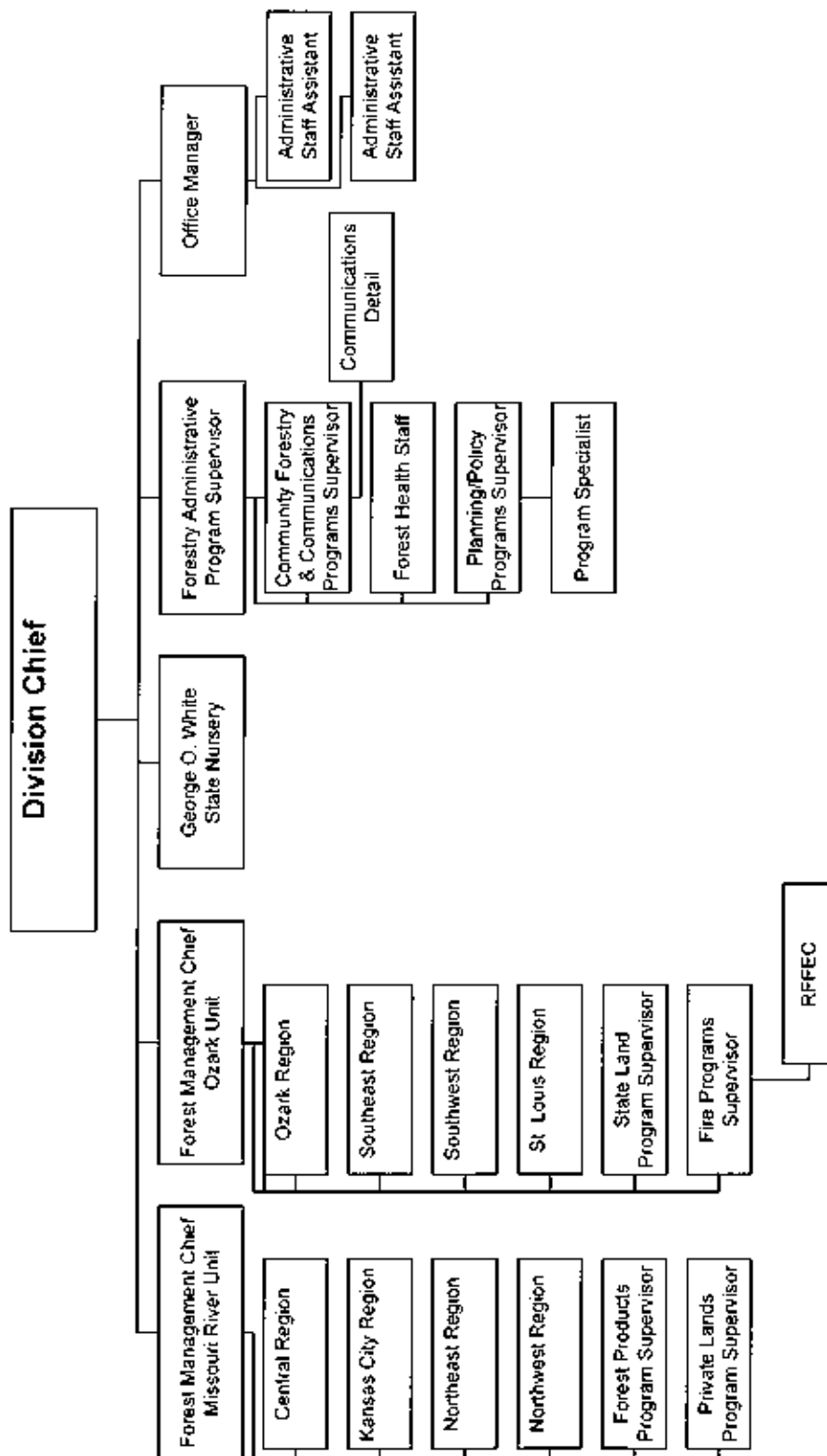
Regional staff is responsible for monitoring and maintaining the quality of the aquatic resources, managing the public fisheries resources, providing technical guidance in lake and stream management to private landowners and other state and federal agencies, providing and assisting with public information and education, and representing the division and Department on matters pertaining to the aquatic resources of their region.

The staffs of the four warmwater hatcheries are responsible for rearing the fish needed to stock public waters, waters used for special fishing events, and aquatic resource education. They also play a vital role in our efforts to restore state and federally endangered species. The five coldwater hatcheries rear the trout needed to stock public waters. Their employees are also responsible for stocking and managing the four trout parks that are enjoyed by more than 410,000 anglers each year.

The Stream Unit is responsible for the Missouri Stream Team and Volunteer Water Quality Monitoring public-involvement programs, which consisted of 78,120 citizen volunteers in 2013. Both are cosponsored by the Missouri Department of Natural Resources and the Missouri Conservation Federation. It also oversees a Stream Technical Unit, which provides technical stream services to Department staff, other state and federal agencies, and private landowners.

Central office staff directs and administers division programs, works on the acquisition and development of public fishing and boat access areas, coordinates angler recognition programs, coordinates the production of technical and popular written materials, and provides administrative support for division and Department staff and programs.

# Forestry Division



# Forestry Division

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## Goals

- Implement the Missouri Forest Action Plan.
- Engaging Missouri landowners to actively care for their woods through education, technical service, and development of partnerships with other agencies, organizations, and forest products industry.
- Raise the performance bar of the Forest Products Industry.
- Conduct public-land management activities that are scientifically based and aimed at developing and maintaining healthy forest and woodland ecosystems.
- Establish a communication strategy to engage others in the delivery of key forestry messages.

## Programs

**Private Land:** Foresters assist Missouri landowners with forest management through one-on-one contacts. Foresters often use the Tree Farm program, Forest Stewardship program, state and federal cost-share programs, and offer technical advice to assist landowners. We help 1,715 landowners with management on 114,000-plus acres.

**Public Land:** The division manages more than 440,000 acres of public forest land. Foresters also provide technical assistance on lands managed by the Wildlife Division. We complete 53,660 acres of active management. This includes forest inventory, tree planting, timber sales, forest-stand improvement, wildlife-management practices, and glade and savanna management.

**Fire:** We have statutory responsibility for the state's wildfire suppression. Last year, 3,843 fires burned 40,392 acres in Missouri. Division personnel work closely with more than 776 fire departments to offer training, provide federal excess property, provide grants for the purchase of fire equipment, and promote wildfire-prevention activities.

**Community Forestry:** This program provides planning and technical assistance to more than 150 communities. In addition, the Tree Resource Improvement and Maintenance (TRIM) program provided cost-share assistance to 31 Missouri communities for tree planting and maintenance of their community forest resources. In partnership with the National Arbor Day Foundation we promote and administer the Tree City USA program certifying 85 communities for dedicated care of their tree resource, the TreeLine USA program recognizing 11 utility providers in the state for quality tree care, and the Tree Campus USA program recognizing 7 colleges and universities in the state for dedicated care of their tree resource.

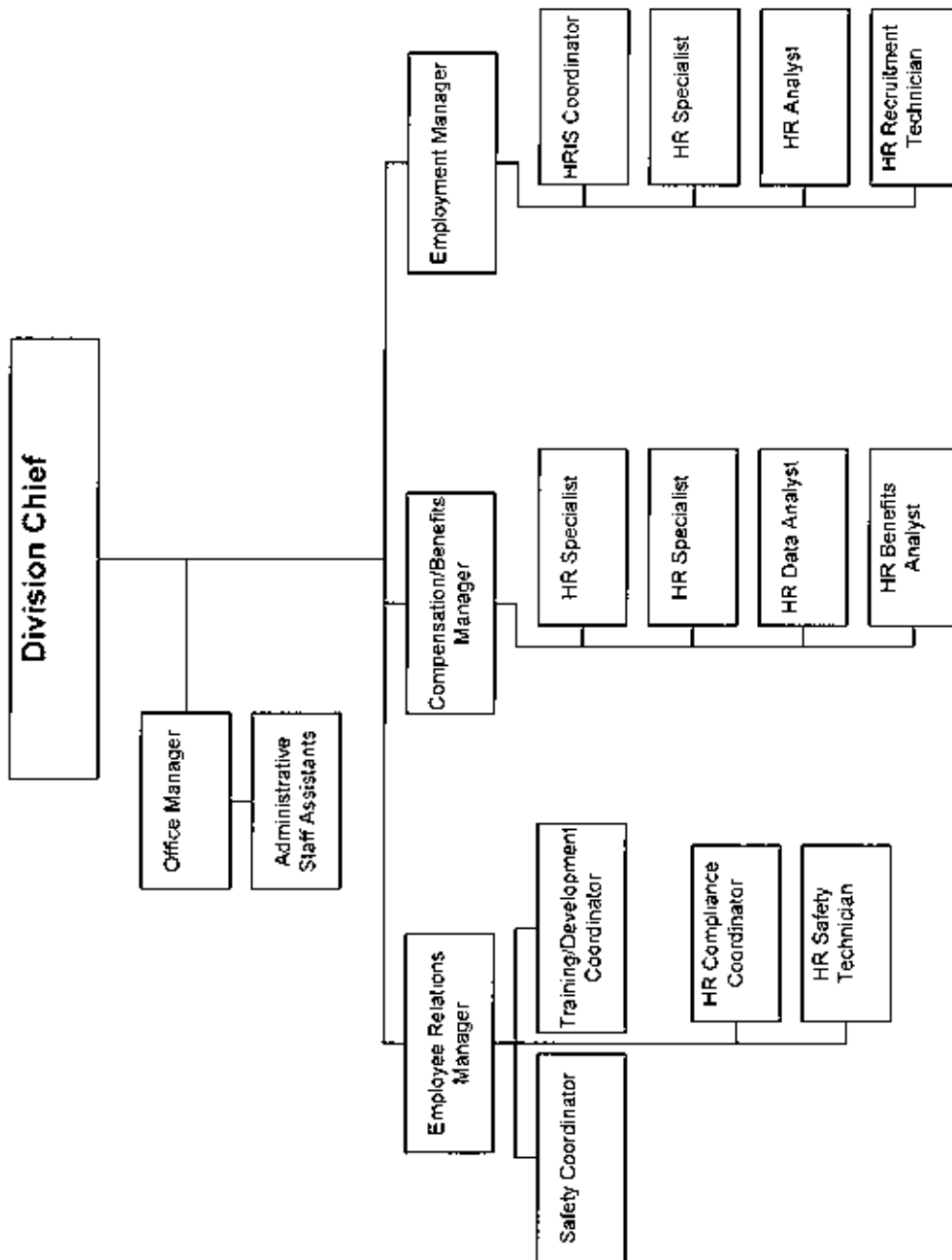
**Forest Products:** This program provides technical assistance to the wood products industry and statewide promotion of Best Management Practices (BMPs) for water quality on timber sales. We work with the Missouri Forest Products Association to provide programs such as the Professional Timber Harvesters and Master Logger Certification programs. We work with entities interested in the emerging bio-energy field and provide technical training for field foresters regarding wood use, timber harvesting techniques, and contracting and implementing BMPs.

**Communication:** Forestry Division works closely with the Outreach and Education Division to increase Missourians' understanding about their state's forest resources and proper forest-management activities. In addition, foresters conduct programs, field days and workshops for schools, special-interest groups, and the general public on a wide range of forest-management issues.

**State Forest Nursery:** The nursery annually grows and distributes approximately 3 million seedlings of more than 60 species. The seedlings include trees and shrubs suitable for reforestation and wildlife-habitat restoration activities. The seedlings are planted on both public and private land throughout the state.

**Forest Health:** The forest health program's goal is to ensure that Missouri has a healthy and growing forest resource. Diagnosing, monitoring, and providing management solutions for a wide range of pests are components of this program. A significant amount of time and effort is spent overseeing monitoring efforts for invasive pests such as gypsy moth, emerald ash borer, and thousand cankers disease of black walnut.

# Human Resources Division



# Human Resources Division

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## Goals

- Automate and streamline Human Resources processes
- Professional Development Academy and Safety Program: Identify and implement current and future Department-wide training needs
- Research and implement health insurance changes required by the Patient Protection and Affordable Care Act

## Programs

**Human Resources:** Staff is responsible for development and administration of a department-wide human resources program.

**Health Insurance:** Staff administers a comprehensive medical and life-insurance program and advises the Conservation Employees' Benefits Plan Board of Trustees on mandatory requirements of legislation, such as the Patient Protection and Affordable Care Act.

**Compensation and Benefits:** Staff performs compensation and classification activities that are used to support a total rewards program, which is both competitive and fiscally responsible. Staff also administers significant employee-benefits programs such as wellness, which includes health screenings and health education; and an Employee Assistance Program.

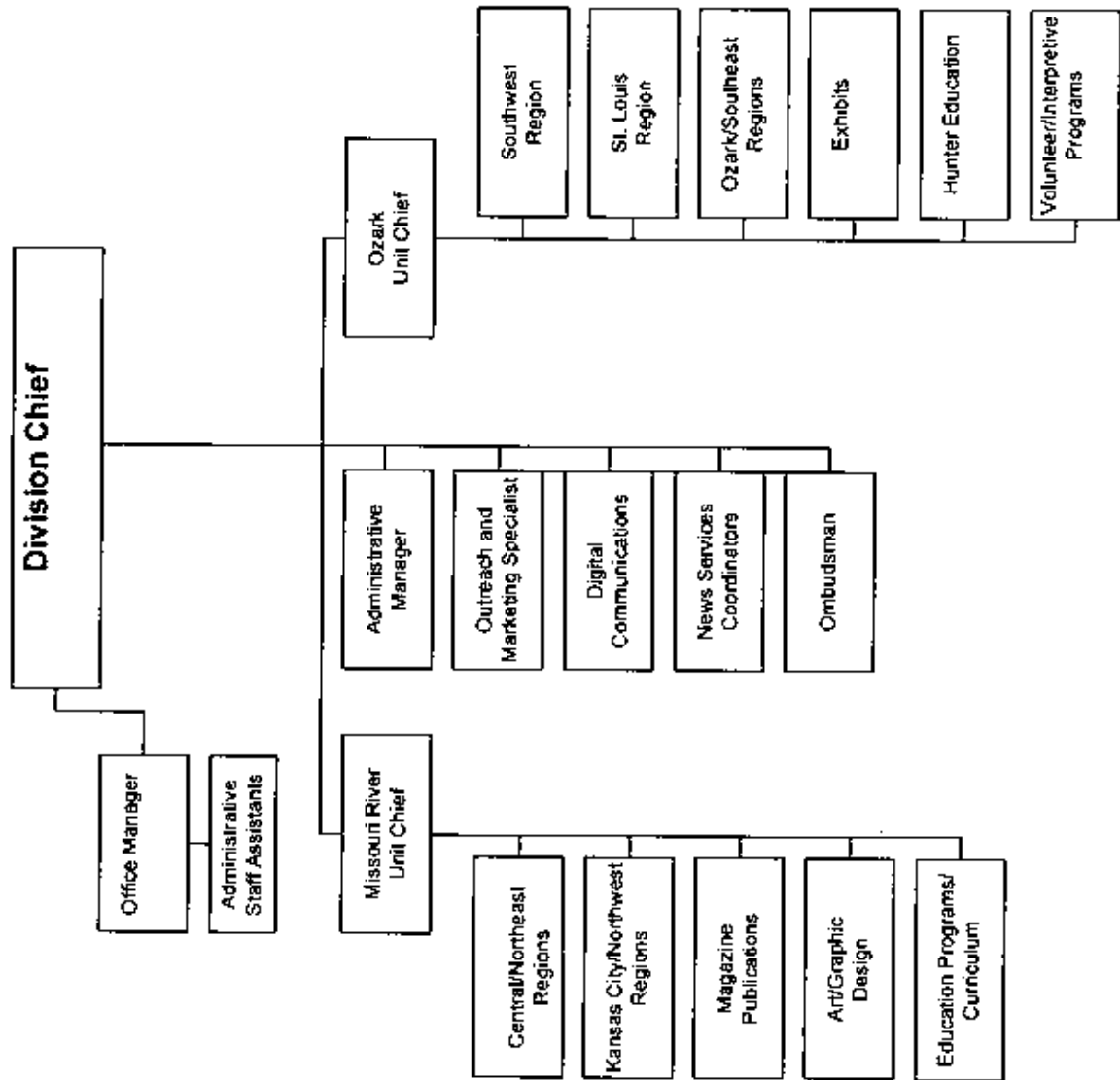
**Recruitment and Selection:** Staff uses a variety of recruitment methods to attract qualified applicants for job and assists supervisors with all activities during the evaluation and recommendation processes. Staff monitors the Department's affirmative-action effort to ensure equal-employment opportunities

**Vendor Apparel:** Staff maintains the vendor apparel contract to ensure employee appearance projects an efficient and professionally operated Department and that staff are recognized as Department employees.

**Employee Relations:** Staff administers and develops new or revised Human Resources policies that help supervisors guide employees uniformly and fairly. Staff tracks state and federal laws, executive orders, and regulations that address human resources management issues, and works to ensure the Department is in compliance. Staff also assists employees and supervisors during dispute resolution and corrective action processes to ensure objective, fair, and appropriate actions occur. Staff also administers the Professional Development Academy, the Department-wide Safety Program and Informed Consent Training, a course aimed at making the problem-solving and decision-making of public agencies both more responsive (to public concerns) and more responsible (for accomplishing our mission).



# Outreach and Education Division



# Outreach and Education Division

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## Goals

- Teach Missourians about healthy and sustainable plant and animal communities
- Empower all Missourians with the skills and knowledge to enjoy the outdoors
- Help citizens understand how conservation benefits Missouri and how participation in outdoor activities enriches their lives
- Communicate the importance of science-based decisions in managing Missouri's forest, fish, and wildlife
- Instill an understanding of outdoor ethics and personal responsibility in practicing ethical, respectful outdoor behaviors
- Help Missourians understand these key concepts of conservation:
  - a. A healthy environment needs a diverse mix of plants and animals.
  - b. Forests, grasslands, rivers, and wetlands are always changing
  - c. What goes onto or into the ground flows downhill into streams and rivers, and ponds and lakes.
  - d. Hunting, fishing, trapping, and harvesting wood are part of Missouri's heritage, provide valuable resources, and, done properly, are tools that can be used to improve and maintain the health of our fish, forests, and wildlife.

## Programs

**Outreach:** The *Missouri Conservationist* magazine is mailed to more than 550,000 subscribers each month and covers a variety of nature, conservation, and outdoor-recreation subjects. *Xplor*, a kids' magazine, has more than 175,000 subscribers and offers suggestions for family oriented outdoor activities. We serve up millions of Web pages each year, produce free publications, for-sale books, and news releases on topics as diverse as bird identification, hunting and fishing regulations, and how to create wildlife habitat. The ombudsman helps answer citizens' questions and helps to investigate concerns and resolve complaints.

**Conservation Nature Centers, Education Centers, and Visitor Centers:** These are located in Jefferson City, Kirkwood, Blue Springs, Springfield, Cape Girardeau, St. Charles, Winona, St. Louis, Branson, and Glencoe. Exhibits and naturalist-led programs, as well as walking trails, offer about a million visitors each year a variety of opportunities to learn about and enjoy Missouri's nature. These facilities host programs for families, women, and other target audiences that teach skills to enjoy the outdoors.

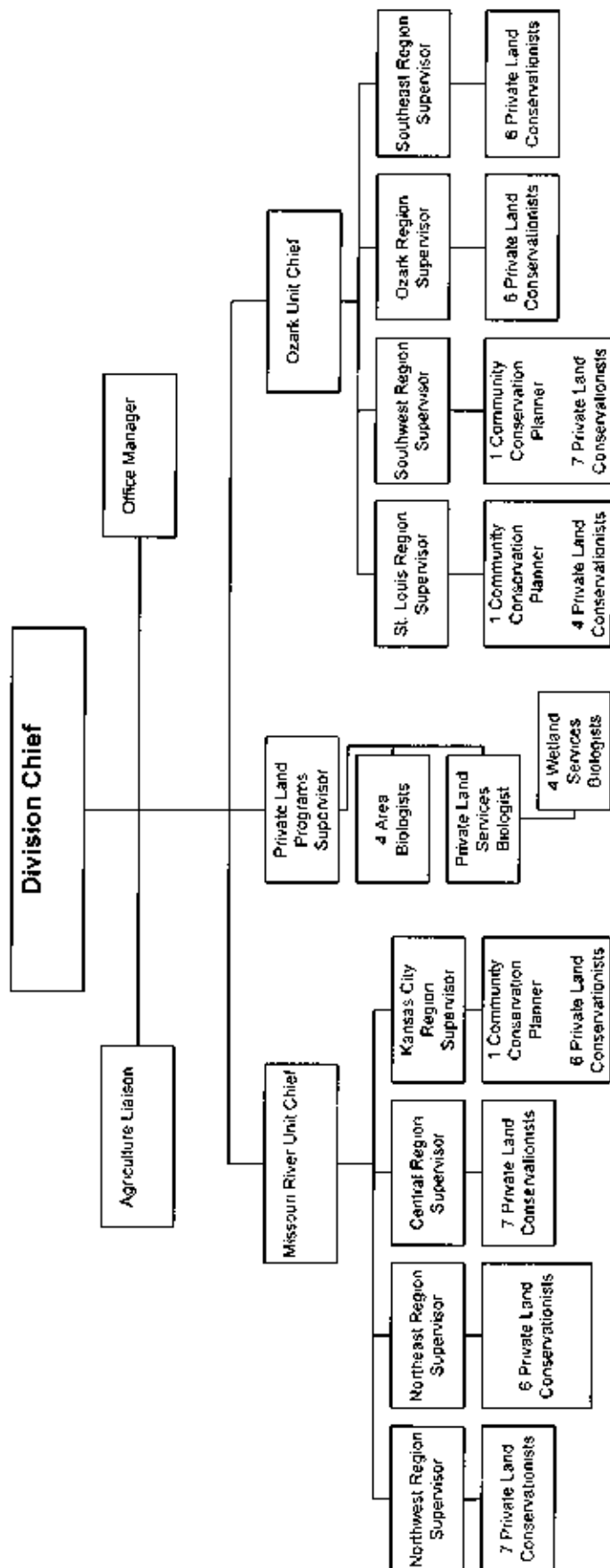
**Hunter Education:** Since 1988, hunter-education training has been mandatory for all hunters born on or after Jan. 1, 1967. O&E staff works with the conservation agents to coordinate volunteer hunter-educators, who provide about 950 classes each year. These result in hunter certification of about 25,000 people annually. Online course expands the training opportunities.

**Shooting Range/Outdoor Education Centers:** Five staffed shooting ranges provide safe, inviting places for hunters and others to practice shooting rifles, shotguns, handguns, and archery equipment. Classes are offered to the public and designed to give beginning shooters and hunters the skills they need. More than 170,000 people each year use the staffed ranges. In addition, more than 75 unstaffed ranges (including both firearms and archery ranges) serve Missourians throughout the state.

**Citizen Involvement:** Several programs help Missourians promote conservation at a statewide and grass-roots level. More than 2,500 citizens volunteer through a number of different programs. More than 100 citizens volunteer at staffed shooting ranges, more than 400 at nature centers, more than 1,000 through the Master Naturalist program, and more than 700 citizens are involved in the Volunteer Hunter Education program. This translates to more than 130,000 volunteer hours for conservation activities.

**Discover Nature Schools:** Missouri's children are the key to Missouri's future. Working closely with the Missouri Department of Elementary and Secondary Education, we have developed conservation education curriculum materials for grades pre-kindergarten through 12 that are in 79 percent of Missouri school districts. These curriculums use Missouri examples to teach science-based concepts. The materials are available to all Missouri schools at no charge.

# Private Land Services Division



# Private Land Services Division

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## Goals

- Provide timely technical advice to private landowners who request assistance
- Help interested private landowners provide meaningful benefits to fish, forest, and wildlife resources that need attention
- Increase awareness of conservation importance by connecting with agriculture and communities

## Programs

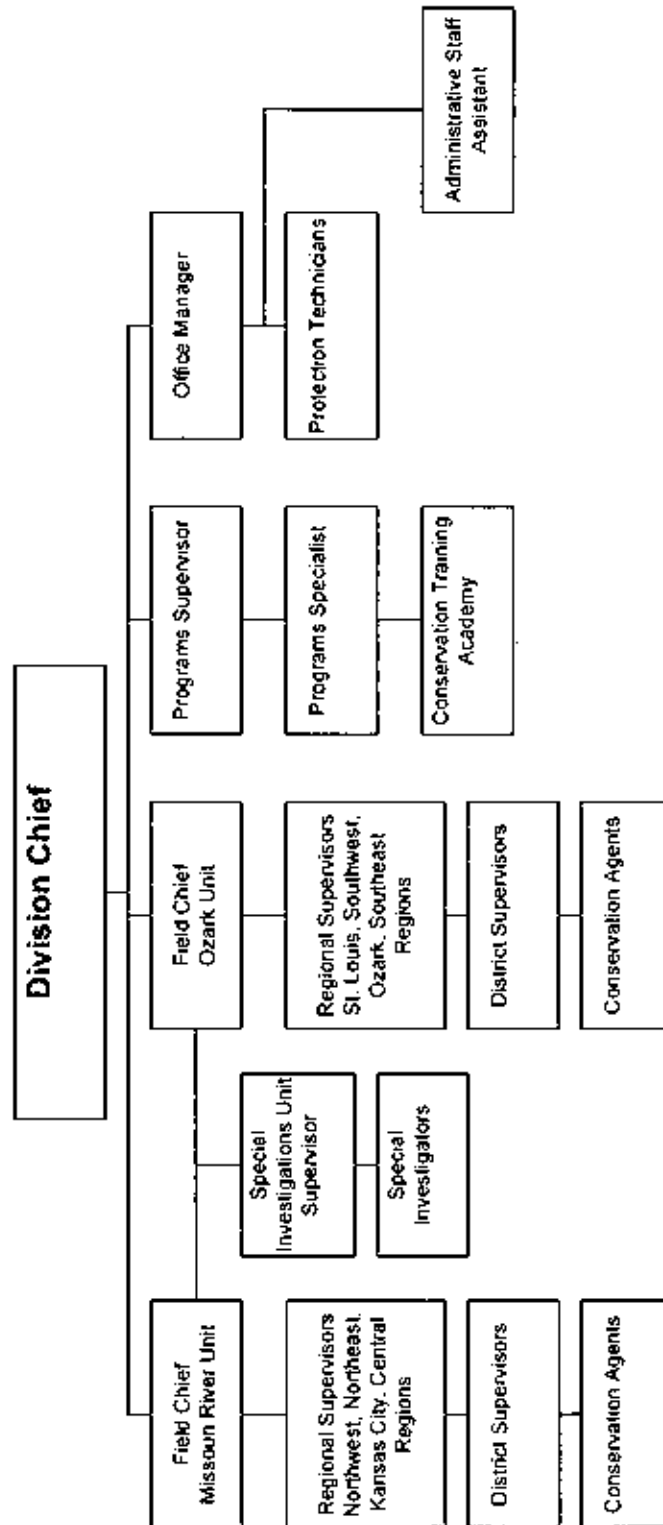
**Technical Support:** Private Land Conservationists are available to evaluate resource needs and provide advice/recommendations to private landowners through in-office or on-ground visits, as well as workshops, field days and other initiatives. Most of these positions are co-located in USDA service centers to make contact easy for private landowners throughout the state.

**Financial Assistance:** The Department has established effective working partnerships with private landowners through the Natural Resources Conservation Service and Farm Service Agency to integrate fish, forest, and wildlife considerations into implementation of Farm Bill programs that include Conservation Reserve Program, Wetland Reserve Program, Environmental Quality Incentives Program, Grassland Reserve Program, Conservation Stewardship Program and Wildlife Habitat Incentives Program. MDC is also in partnership with non-governmental organizations such as Ducks Unlimited, Quail Unlimited, the National Wild Turkey Federation, Quail Forever, Pheasants Forever, and Quail and Upland Wildlife Federation to develop cost-share and other initiatives through matching agreements.

**Agriculture Liaison:** Liaison efforts with agricultural agencies and groups foster communication and understanding of fish, forest, and wildlife issues as they relate to agriculture. These efforts are important since 65 percent of the land area of Missouri is included in farms.

**Community Conservation:** Community Conservation Planners in Kansas City, St. Louis, and Springfield/Branson/Joplin areas are available to deliver natural-resource technical services at the municipal, county, and regional levels. Their job focus is to work with communities, urban planners, and developers to help them make informed land-use decisions that incorporate the conservation of Missouri's forest, fish, and wildlife resources.

# Protection Division



# Protection Division

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## Goals

- Provide high-quality resource law-enforcement services to the public for protection and conservation of Missouri's fish, forest, and wildlife, as well as for safe and proper public uses of conservation areas
- Provide opportunities for all citizens to use, enjoy, and learn about fish, forests, and wildlife through educational and informational programs and habitat management advice
- Represent the Conservation Commission, the Department, and the state with knowledgeable, respectful, well-trained, and professional employees versed in all general Department programs in every county

## Programs

**Conservation Agents:** Agents carry out a variety of programs within their county assignments. Major job components are resource law-enforcement activities, hunter education, local media liaison duties (many with regular radio/TV programs and newspaper articles), educational and informational presentations to adult and youth groups, wildlife surveys, response to fish kills, wildlife-nuisance and damage complaints, and basic fish-, forest-, and wildlife-management advice and services to private landowners.

Conservation agents contacted 179,950 hunters and anglers in fiscal year 2014 to ensure compliance and to provide regulation information. During these contacts, agents noted 25,479 resource violations, issued 3,298 written warnings, and made 6,743 arrests. From those 6,743 arrests, of those cases adjudicated, 99 percent resulted in a guilty plea or verdict. This high conviction rate indicates excellent public support and high-quality work by agents.

**Operation Game Thief:** Operation Game Thief provides a way for citizens to anonymously report poaching incidents with the opportunity for a monetary reward. In the calendar year 2013, OGT produced 289 convictions from 981 telephone calls, which resulted in \$12,900 in reward money being paid to informants. The Operation Game Thief traveling exhibit was completely redesigned this past year and used at seven events, including the state fair.

**Revocations:** Missouri is a participating state in the Interstate Wildlife Violator Compact (IWVC). The compact is a legal organization of the wildlife agencies of 43 member states that agree to reciprocally honor revocations/suspensions of hunting, fishing, and trapping privileges for wildlife-related violations. During the last fiscal year, 2,662 people from other states had their privileges revoked in Missouri through provisions of the Interstate Wildlife Violator Compact; an additional 210 were revoked for cause by the Conservation Commission in Missouri and submitted to the IWVC. Participation in the compact also benefits Missourians who travel to other compact member states for hunting and fishing activities. If found in violation, they may be given the opportunity to resolve the citation by mail rather than being required to post a bond before leaving the member state. They are subject to revocation by all compact states if the citation is ignored.

**Hunter Education:** Hunter-education certification or apprentice hunter authorization is required for purchasing any type of Missouri firearm-hunting permit for people born on or after Jan. 1, 1967 (except the youth deer-and-turkey hunting permit). Conservation agents work with Outreach and Education Division personnel and approximately 998 volunteer instructors to coordinate hunter education courses in all 114 Missouri counties. Protection Division personnel also are responsible for investigating hunting incidents throughout the state.

**Hunting Method Exemption Program:** The Hunting Method Exemption program provides special exemptions to physically disabled people by allowing them to hunt and take wildlife by methods not otherwise legally permitted. During fiscal year 2014, 5,545 hunter method exemptions were approved.

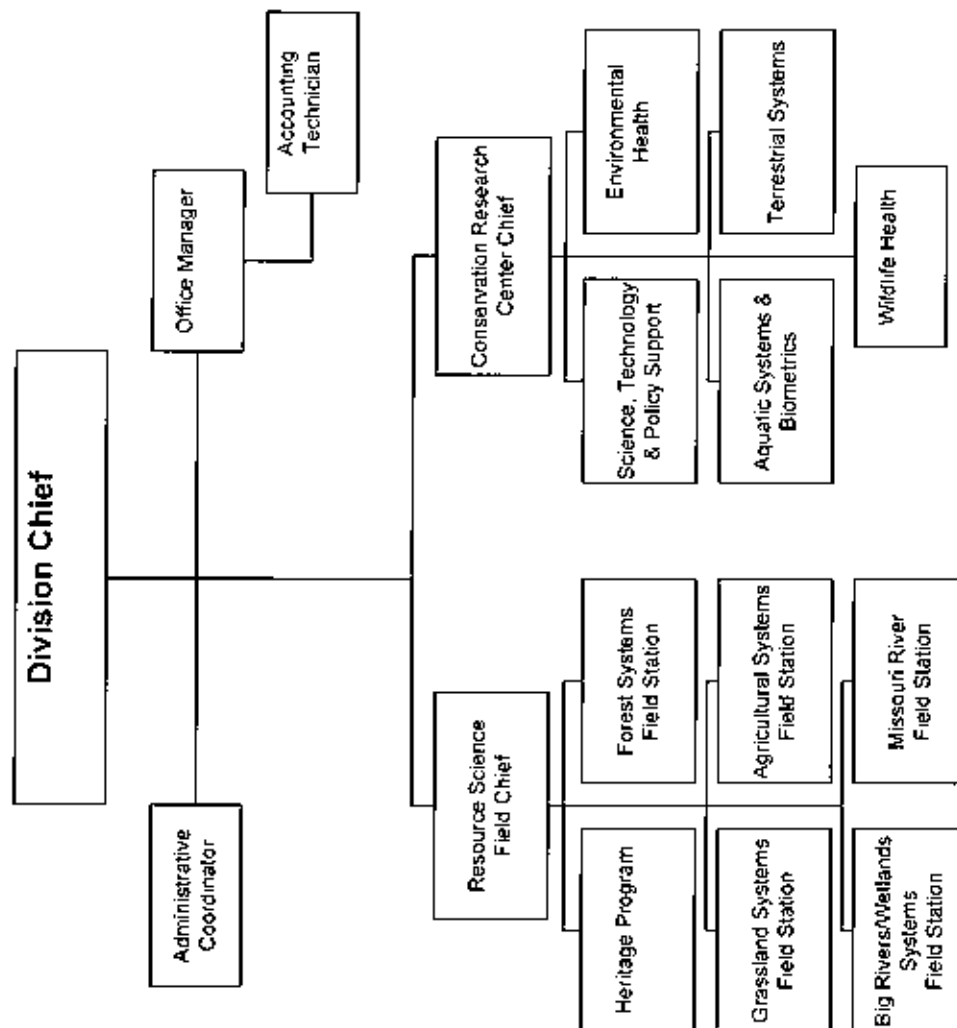
**Group Fishing Permit Exemptions:** Protection Division administers permit-exemption authorizations to supervised groups involved in rehabilitation programs or groups of hospital patients or people with disabilities under therapy or for educational purposes. During this past fiscal year, 478 group-fishing permits were issued for outings — providing fishing experiences to people who otherwise may not be able to participate in outdoor fishing activities.



**Share the Harvest:** Conservation agents and the Conservation Federation of Missouri coordinate the Share the Harvest program, where hunters donate deer meat to those less fortunate through established charitable organizations. During FY14, approximately 4,489 hunters donated 227,358 pounds of venison to needy Missourians. Since the inception of the program, over 3 million pounds of deer meat have been donated to Missouri citizens. Hunters donating venison to the program pay for the processing and tell the processor how many pounds of meat they want to donate. Hunters who donate their entire deer may receive a \$60 reduction in the price of processing, which is paid to the processor by the Missouri Conservation Federation. In some cases, local organizations provide additional funds for processing so there is no cost to hunters who wish to donate deer.



# Resource Science Division



# Resource Science Division

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## Goals

Natural-resource management is based on sound biological, geographical, and sociological information. An objective to establish a nationally recognized, science-based model for conservation will be accomplished by:

- Ensuring ongoing development of a comprehensive and integrated understanding of Missouri's living resources and their values to society
- Using accumulated knowledge to inform and recommend conservation actions
- Evaluating the biological and social impacts of conservation actions
- Reporting emerging knowledge of Missouri's living resources

**Terrestrial Systems** scientists strive to understand plant and animal habitat relationships, monitor population status, and develop harvest and species-management recommendations. Staff are regularly involved with specialized projects to monitor wildlife, plant diversity, and plant and animal population changes. They also are responsible for developing harvest regulations for upland species such as deer, turkey, and furbearers.

**Aquatic Systems and Biometrics** scientists conduct research and surveys that focus on issues involving fisheries management, wetland and waterfowl management, fish communities, watersheds, stream-riparian-floodplain systems, reservoirs, in-stream flow, species of conservation concern, and interactions among predators and prey. This group develops harvest management recommendations for statewide fish populations, waterfowl, and other migratory birds. Biometricians ensure statistically sound study designs and the use of appropriate statistical techniques to analyze and interpret complex natural resources questions.

**Science, Technology and Policy Support** staff work to link and improve access to databases which document Missouri's rich biodiversity and support research and management objectives. Post-season hunter and angler harvest surveys, attitude surveys, public-use surveys, and focus groups are conducted to better understand the opinions and behaviors of Missouri resource users and to ensure that human-dimensions information is integrated with biological information to inform management decisions. Natural-resource economics data are collected in conjunction with the public use and attitude information. GIS staff use geospatial technology and products to support natural-resource management and policy decisions, archive the processes and evaluate the results. The GIS program supports ArcGIS users throughout the Department. Training courses are conducted to help train new ArcGIS users and improve the skills of existing users.

The **Environmental Health** unit primarily provides the services that ensure monitoring and protection of Missouri's fish and wildlife resources. Primary functions include protecting aquatic biodiversity such as mussel conservation and genetics research, water quality, and providing responsive service to agency staff, the public, and other agencies and entities. Staff coordinate pollution and fish-kill investigations with the Department of Natural Resources, and monitor contaminants in fish with the Department of Health.

The **Wildlife Health** unit coordinates and conducts research and monitoring programs statewide for the prevention, detection, control, and management of emerging and known diseases occurring in wildlife populations. Staff collaborate with local, state, federal, and private stakeholders to address concerns about the impact of wildlife diseases on the public and domestic animal health. Information provided by this unit is used to inform Department regulations, policy and management decisions to prevent, control and/or mitigate wildlife health issues.

The **Heritage Program** unit provides expertise and location information to the Department, its partners, and the public on plants, reptiles and amphibians, karst communities, mammals, and insects of conservation concern by means of workshops, publications, and personal contact. By maintaining the Missouri Natural Heritage Database, this program tracks the status and presence of 1,158 species of conservation concern and natural communities. Scientists survey for species presence and population trends, develop life-history information, and make management evaluations. Staff ensure accurate documentation and archiving of occurrences of species of conservation concern and natural communities that can be used for regulation purposes and management.

The **Field Unit of Resource Science Division** is leading regional management evaluations by developing protocols and study designs with the goal of learning by doing. Field stations, actively integrated with the division's centralized functions, focus on improving understanding of ecological systems, functions, and processes by working with regional staff throughout the state.

- 1) The **Grasslands Systems Field Station in Clinton** focuses on ecological processes and management implications for cool- and warm-season grass pastures and hay lands, native prairie, savannas and glades, and grassland-associated fish, invertebrate, wildlife species of conservation concern and all streams and impoundments fed by grassland watersheds.
- 2) The **Forest Systems Field Station in West Plains** focuses on ecological processes and management implications for upland forests, glades, savannas, springs, karst, fens and cold- and warm-water streams and impoundments drained by forested watersheds and management of forest-associated fish, invertebrate, and wildlife species of conservation concern.
- 3) The **Big Rivers and Wetlands Systems Field Station in Jackson** focuses on Missouri's large rivers and associated floodplains to understand landscape-level ecological processes. Staff develop tools and strategies to improve channel and floodplain habitats, bottomland forests, and wetlands for fish, invertebrate, and wildlife communities including species of conservation concern.
- 4) The **Agricultural Systems Field Station in Kirksville** emphasizes annually cropped lands that produce cereal grains, oil crops, crops for human consumption, and annually planted livestock forages. Also included in the field station's focus are retired crop lands including CRP plantings, cool-season grass pastures and old fields, concentrated-livestock operations, streams and impoundments drained by agricultural watersheds and management for agriculturally associated fish, invertebrate, and wildlife species of conservation concern.
- 5) The **Missouri River Field Station in Chillicothe** focuses on issues directly related to management of the Missouri River. Many aspects of large-river ecology are addressed by the Big Rivers and Wetlands Field Station, including some important to the Missouri River. However, several active restoration and recovery programs are being conducted along the Missouri River, and this field station brings a focused and coordinated monitoring approach among agencies to help ensure the success of these programs.

## Programs

**Population management:** Manage for, and when feasible, restore viable populations of plants, fish, and wildlife compatible with the ecological capability of the land and balanced with the desires of resource users and the public.

Resource Science Division identifies priority population management challenges and develops recommendations, in collaboration with resource divisions, to manage harvested species, species of concern, and invasive species.

**Ecological processes:** Increase our understanding of the processes that determine habitat conditions for native and introduced animals and plants.

Erosion and deposition through water, wind, and fire are the natural disturbance and renewal processes that are essential to maintaining healthy systems and functions. The division focuses investigations on how to effectively re-establish or mimic these processes in Missouri's contemporary landscape to ensure restoration and management of plant and animal communities.

**Management evaluation:** Ensure that results of management and policy actions are measured and appropriately linked to resource-related outcomes, budgets, and staff time.

Ongoing evaluation of resource responses and resource uses are essential to determine whether goals are met and to understand when change is needed. Resource Science Division promotes learning by doing to improve resource-management programs and to ensure accountability of staff and budget resources.

**Human dimensions:** Provide and promote the use of human-dimensions information in the management decision process.

Resource Science Division collaborates with other divisions to ensure that human-dimensions information is acquired and used in policy and management decisions. This information is used to track changing public expectations, anticipate demographic trends, and ultimately provide the information needed to make sound resource policy and management decisions.

**Large-scale planning:** Ensure that all planning and program efforts are based on sound science and include evaluation measures.

Advances in Geographic Information Systems and associated ecological and geospatial applications (e.g., Ecological Classification Systems) are used to inventory, assess and monitor resource condition, and management results at national, state, regional, and area scales.

**Information transfer:** Manage, share, and transfer data collected in a useful, archivable and easily obtainable format. The division ensures that information about resource investigations, population status, harvest, and public use is timely, current, accurate, and available in a form that is useful.

**Environmental health:** Monitor the health of aquatic and wildlife resources in the state, assist in control and mitigation of identified threats, and provide up-to-date information to guide policy and management decisions regarding resource health related issues.

Environmental health issues are addressed through research and monitoring programs for the prevention, detection, control, and management of emerging and known aquatic health, water quality and stream flow issues, and diseases of wildlife populations. Collaboration among Department Divisions as well as with other State and Federal agencies is fostered to ensure the success of this program.



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graph TD
    DC[Division Chief] --> OM[Office Manager]
    DC --> WCP[Wildlife Conservation Planner]
    DC --> WMTU[Wildlife Management Unit Missouri River Unit]
    DC --> WMTUOZ[Wildlife Management Unit Ozark Unit]
    DC --> WHC[Species & Habitat Chief]
    DC --> WAM[Wildlife Administrative Manager]

    WMTU --> KCRS[Kansas City Region Staff]
    WMTU --> NCRS[Northwest Region Staff]
    WMTU --> CCRS[Central Region Staff]
    WMTU --> NCRS2[Northeast Region Staff]

    WMTUOZ --> SLRS[St. Louis Region Staff]
    WMTUOZ --> SRS[Southeast Region Staff]
    WMTUOZ --> SWRS[Southwest Region Staff]
    WMTUOZ --> ORS[Ozark Region Staff]
    WMTUOZ --> WDP[Wildlife Damage Project Leader]

    WHC --> WECBC[Wildlife Ecologist Bird Conservation]
    WHC --> WDC[Wildlife Diversity Coordinator]
    WHC --> WSC[Wildlife Systems Coordinator]
    WHC --> WMC[Wildlife Management Coordinator]

    WECBC --> WEGC[Wildlife Ecologist Grassland Coordinator]
    WECBC --> WENAC[Wildlife Ecologist & Natural Area Coordinator]

    WMC --> EPM[Elk Program Manager]
    WMC --> SGC[Small Game Coordinator]

    WAM --> OMS[Outreach & Marketing Specialist]
    WAM --> PLC[Public Lands Coordinator]
  
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The organizational chart for the Missouri Department of Conservation, Wildlife Division, is structured as follows:

- Division Chief**
  - Office Manager**
  - Wildlife Conservation Planner**
  - Wildlife Management Unit Missouri River Unit**
    - Kansas City Region Staff
    - Northwest Region Staff
    - Central Region Staff
    - Northeast Region Staff
  - Wildlife Management Unit Ozark Unit**
    - St. Louis Region Staff
    - Southeast Region Staff
    - Southwest Region Staff
    - Ozark Region Staff
    - Wildlife Damage Project Leader
  - Species & Habitat Chief**
    - Wildlife Ecologist Bird Conservation
      - Wildlife Ecologist Grassland Coordinator
      - Wildlife Ecologist & Natural Area Coordinator
    - Wildlife Diversity Coordinator
    - Wildlife Systems Coordinator
    - Wildlife Management Coordinator
      - Elk Program Manager
      - Small Game Coordinator
  - Wildlife Administrative Manager**
    - Outreach & Marketing Specialist
    - Public Lands Coordinator

# Wildlife Division

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## Goals

- Actively manage and restore Missouri's plants, animals, and their habitats for the use and enjoyment of present and future generations.
- Strive to integrate biological and social sciences to direct management decisions that benefit all native wildlife and their habitats.
- Work strategically, whether locally, regionally, or nationally, to create and support partnerships, coalitions, and collaborations that further priority wildlife conservation initiatives.
- Promote active citizen involvement in the outdoors and connect urban and rural citizens in a common vision of and appreciation for wildlife, their habitats, and their use.
- Aggressively promote our legacy, successes, and aspirations to deepen the understanding of wildlife conservation.

## Programs

**Habitat Systems:** At all levels, staff work to provide expertise and leadership to Department staff and conservation partners and private landowners to aggressively restore and manage important wildlife habitats and natural communities like wetlands, savannas, glades, forests, and grasslands across Missouri with particular focus on priority geographies. Biologists and conservation area staff manage over 536,000 acres of public land and complete more than 177,000 acres of habitat management each year. Staff lead by example, providing a land management model for other states and for private land alike. The state's Comprehensive Wildlife Strategy uses a framework of partnerships to guide wildlife conservation planning and implementation. Staff work to increase awareness and coordinate the control of terrestrial invasive species. Urban wildlife biologists also provide expertise and guidance to Missouri communities in matters concerning urban wildlife habitat and species management.

**Wildlife Diversity:** Staff coordinate and lead efforts to restore populations of all wildlife, particularly species of conservation concern. Wildlife diversity is maintained and encouraged through natural community management and restoration on Department and private lands. Focused programs, like the endangered species program, Missouri Natural Areas program, all-bird conservation efforts, and State Wildlife Grant program, work in close partnership with experts in Resource Science Division, natural history biologists, and recovery leaders to identify the highest-priority species and management efforts for recovering threatened or endangered species. Conservation and enjoyment of all wildlife species are promoted via outreach and public contacts.

**Wildlife Management and Assistance:** Wildlife management programs work to build capacity, understanding, and appreciation for the use and management of game species, while the assistance program aids the public in damage and nuisance wildlife issues. The integration of biological and social sciences relate wildlife population trends and citizen expectations for wildlife management. Hunting is used as a means to achieve and sustain healthy game populations and encourages wise use of a valued resource. Regional biologists and administrative staff provide input to wildlife regulation policies to ensure opportunities to pursue large and small game. Managed hunts for deer, dove, turkey, and waterfowl provide special opportunities on conservation areas for the interested public, including managed hunts specific to youth and those with disabilities. Urban wildlife biologists also provide expertise and guidance to Missouri communities in matters concerning urban wildlife management like nuisance issues and urban deer management programs.

**Administrative Support:** Leadership and strategic guidance are provided for programs and activities that conserve habitats for all Missouri wildlife locally, regionally, nationally, and internationally. Funding support and budgeting, as well as accomplishment reporting, regulation coordination, public communication and marketing, area planning, and habitat inventory are all active processes that aid staff and the public in the appreciation of the state's wildlife resources. Administration of the Wildlife Restoration Grant, State Wildlife Grant, North American Wetland Conservation Act grants and memorandums of agreement with strategic partner groups ensure conservation relationships that are necessary to rehabilitate critical habitat

and to provide support for operations, maintenance, habitat management, and resource planning on conservation lands. Administrative staff direct and coordinate the development of Missouri's Comprehensive Conservation Strategy: an approach that considers Missouri's Priority Watersheds, Aquatic GAP Project, Forest Action Plan, and Comprehensive Wildlife Strategy to deliver an unprecedented and multi-disciplinary blueprint for forest, fish, and wildlife conservation actions statewide. Approximately 360 conservation areas are also managed to ensure that area facilities are clean and operated in ways that welcome citizen visitors while providing habitat for native plant and animal species.

# Conservation by the Numbers

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- ▲ Actual Funds Available and Disbursements
- ▲ Number of Deer Harvested by County
- ▲ Number of Turkeys Harvested by County
- ▲ Acres of Conservation Land by County
- ▲ Payment In-lieu of Taxes (PILT) by County
- ▲ County Aid Road Trust (CART) Program
- ▲ Capital Improvement Projects Funding by County
- ▲ Number of Deer and Turkey Permit Holders by County of Residence
- ▲ Number of Fishing Permit Holders by County of Residence
- ▲ Number of Small Game Permit Holders by County of Residence
- ▲ Number of Landowner Deer Permit Holders by County of Residence
- ▲ Number of Landowner Turkey Permit Holders by County of Residence
- ▲ Number of Hunting Permit Holders by County of Residence

## MISSOURI DEPARTMENT OF CONSERVATION

Actual Receipts and Disbursements  
For Fiscal Year 2014

### **RECEIPTS**

Sales Tax	\$107,076,440
Hunting, Fishing & Commercial Permit Sales	\$31,725,091
Federal Reimbursements	\$27,945,766
Agricultural Sales	\$3,234,066
Timber Sales	\$2,959,932
Other Miscellaneous Receipts	\$1,476,445
Miscellaneous Fees & Tags	\$1,319,565
Surplus Property	\$1,416,683
Interest	\$384,769
Publication Sales	\$646,623
Nursery Stock Sales	\$813,598
Grants, Gifts, Bequests & Donations	\$20,554
Contractual Services	\$1,237,565
Rentals	\$13,995
Miscellaneous Sales	\$140,209
Land Sales	\$1,047,215
Yield Tax & Other taxes	\$5,012
Refunds	\$52,741
Damage Reimbursements	\$11,171
Concession Income	\$11,211
<b>TOTAL RECEIPTS</b>	<b><u>\$181,538,651</u></b>

### **DISBURSEMENTS**

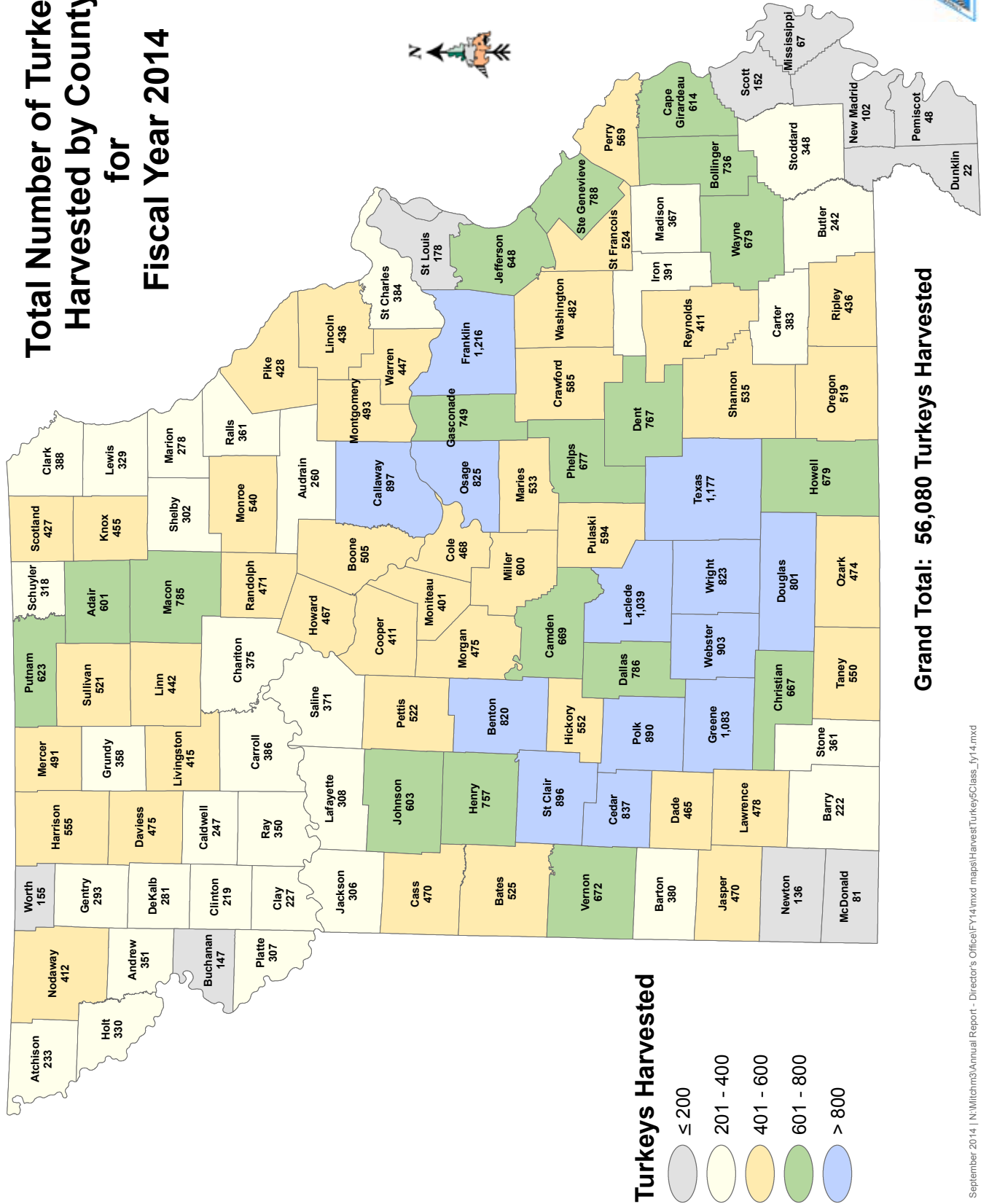
County Assistance Payments	1,689,160
Capital Improvements	14,638,655
Information Technology	12,743,449
Fisheries	14,319,678
Forestry	18,854,335
Wildlife	21,345,613
Outreach & Education	17,058,239
Private Land Services	9,111,375
Protection	16,991,966
Resource Science	12,204,839
Regional Public Contact Offices	2,274,989
Administrative Services	13,326,710
Human Resources	2,559,491
Design & Development	14,644,427
Administration	2,867,828
<b>TOTAL DISBURSEMENTS</b>	<b><u>\$174,630,754</u></b>



**Grand Total: 250,135 Deer Harvested**



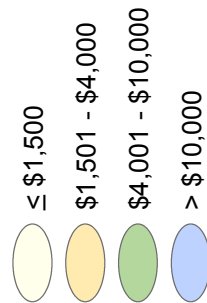
# Total Number of Turkeys Harvested by County for Fiscal Year 2014



2013–2014 MDC Annual Report **87**



## Payments by County

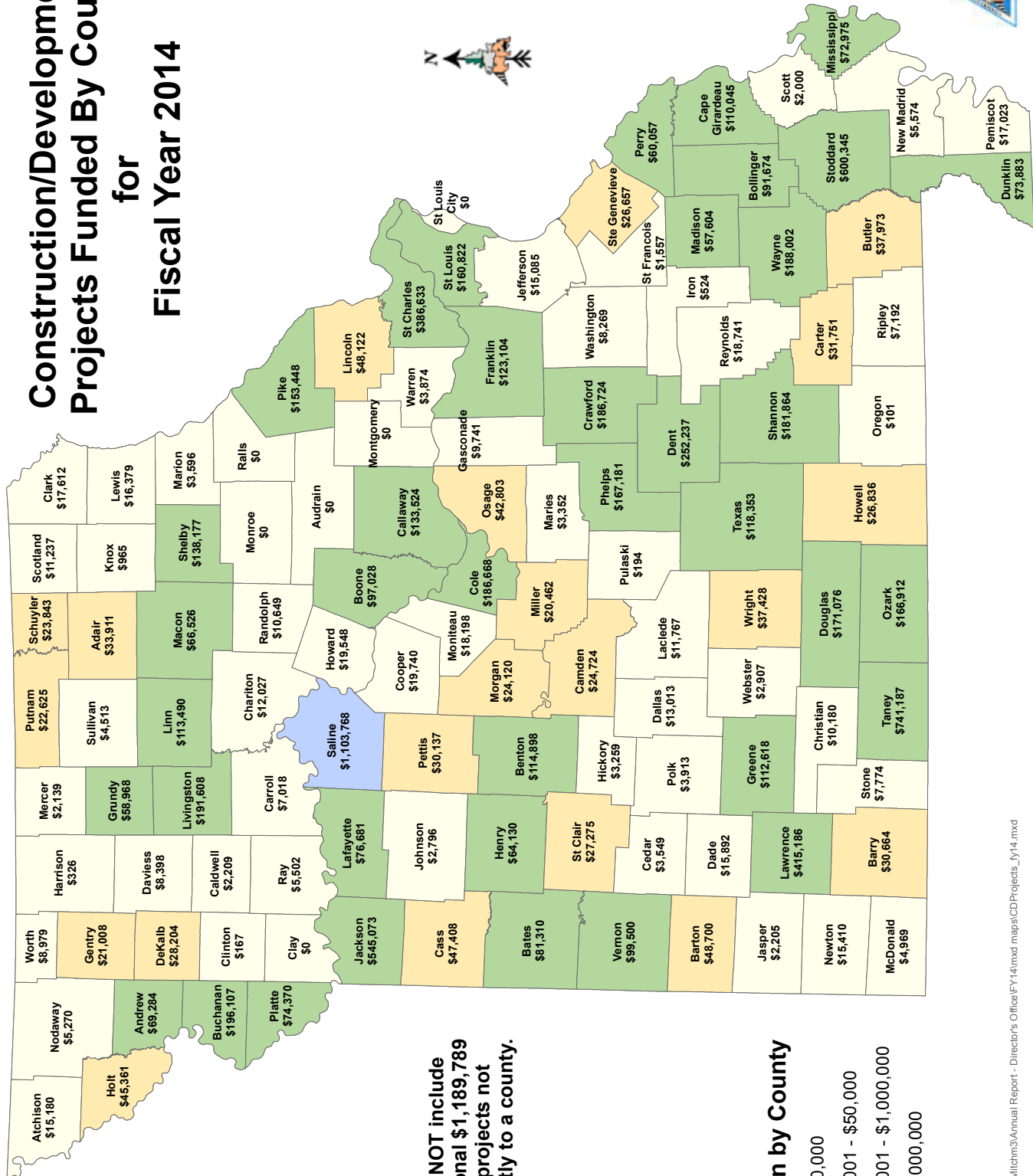




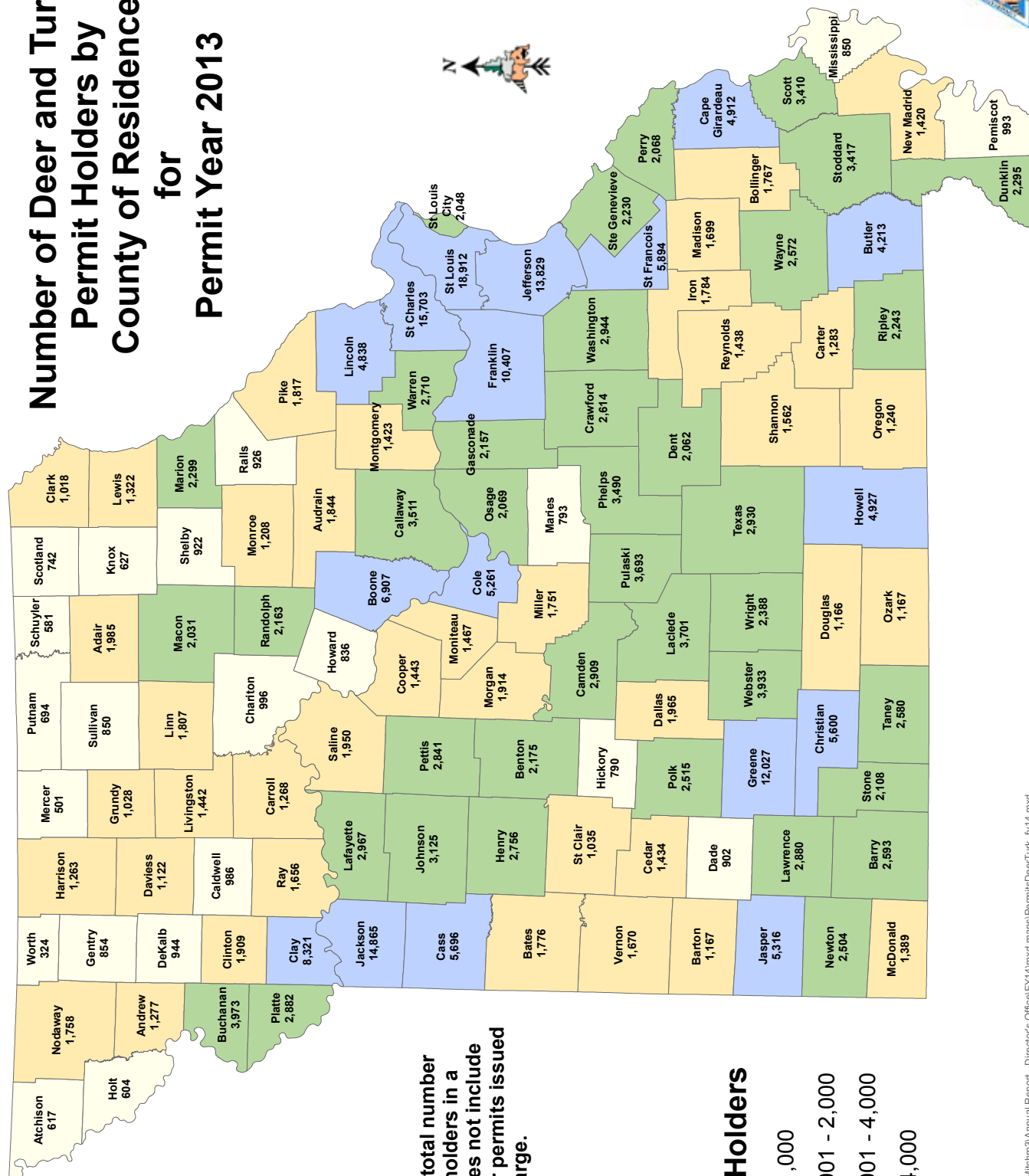
Established in 1983, this program allows for cost share (usually 50% with a county's match being in-kind services) of roadway maintenance with counties and other neighboring landowners. The focus of the program is to help ensure area roads are properly maintained and the public has adequate access to Conservation Areas.



# Construction/Development Projects Funded By County for Fiscal Year 2014

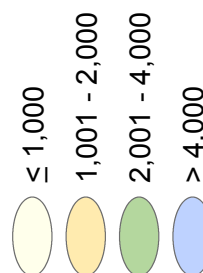


**Number of Deer and Turkey  
Permit Holders by  
County of Residence  
for  
Permit Year 2013**



**Note: The total number of permit holders in a county does not include landowner permits issued free of charge.**

## Permit Holders







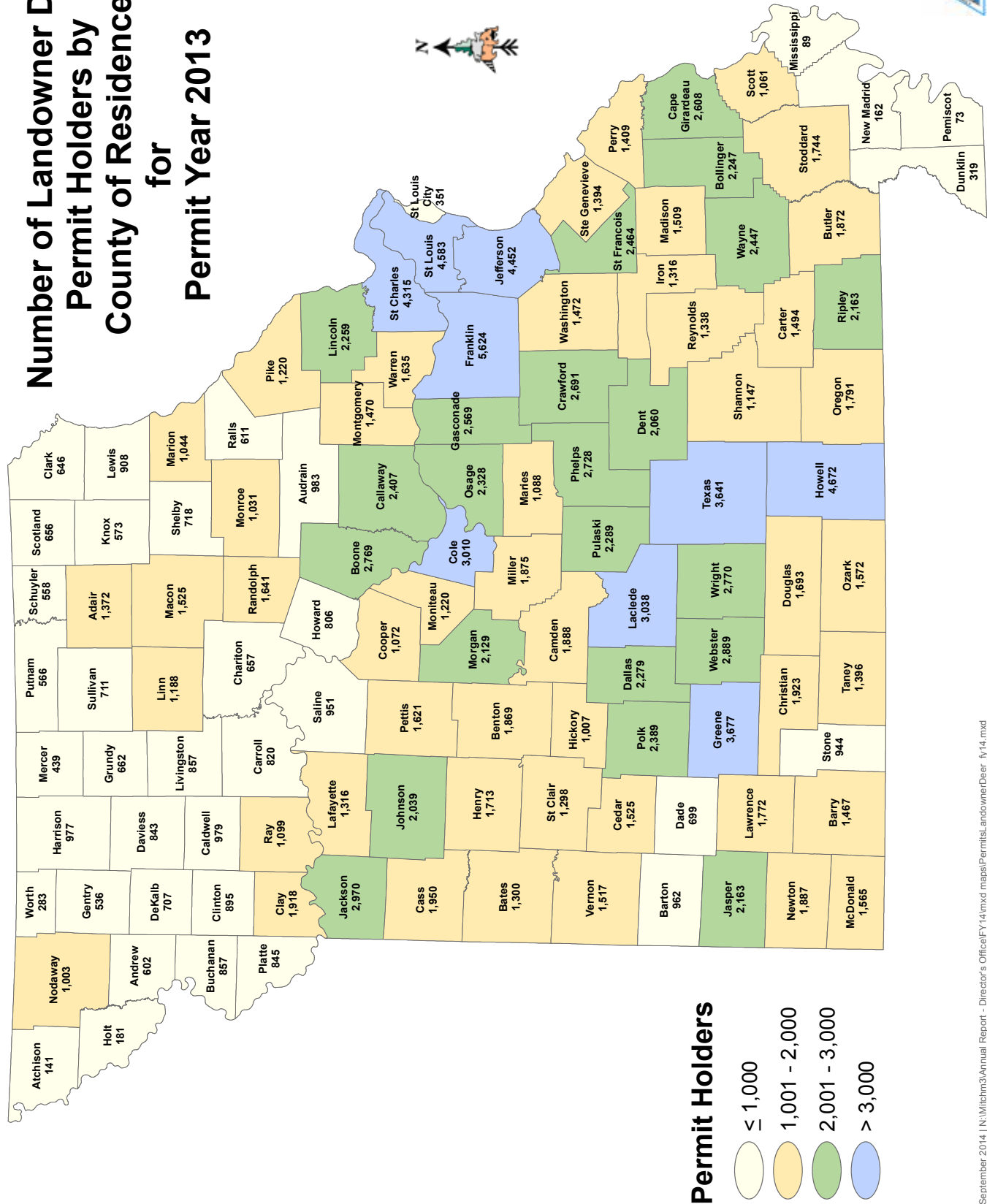
92 2013–2014 MDC Annual Report





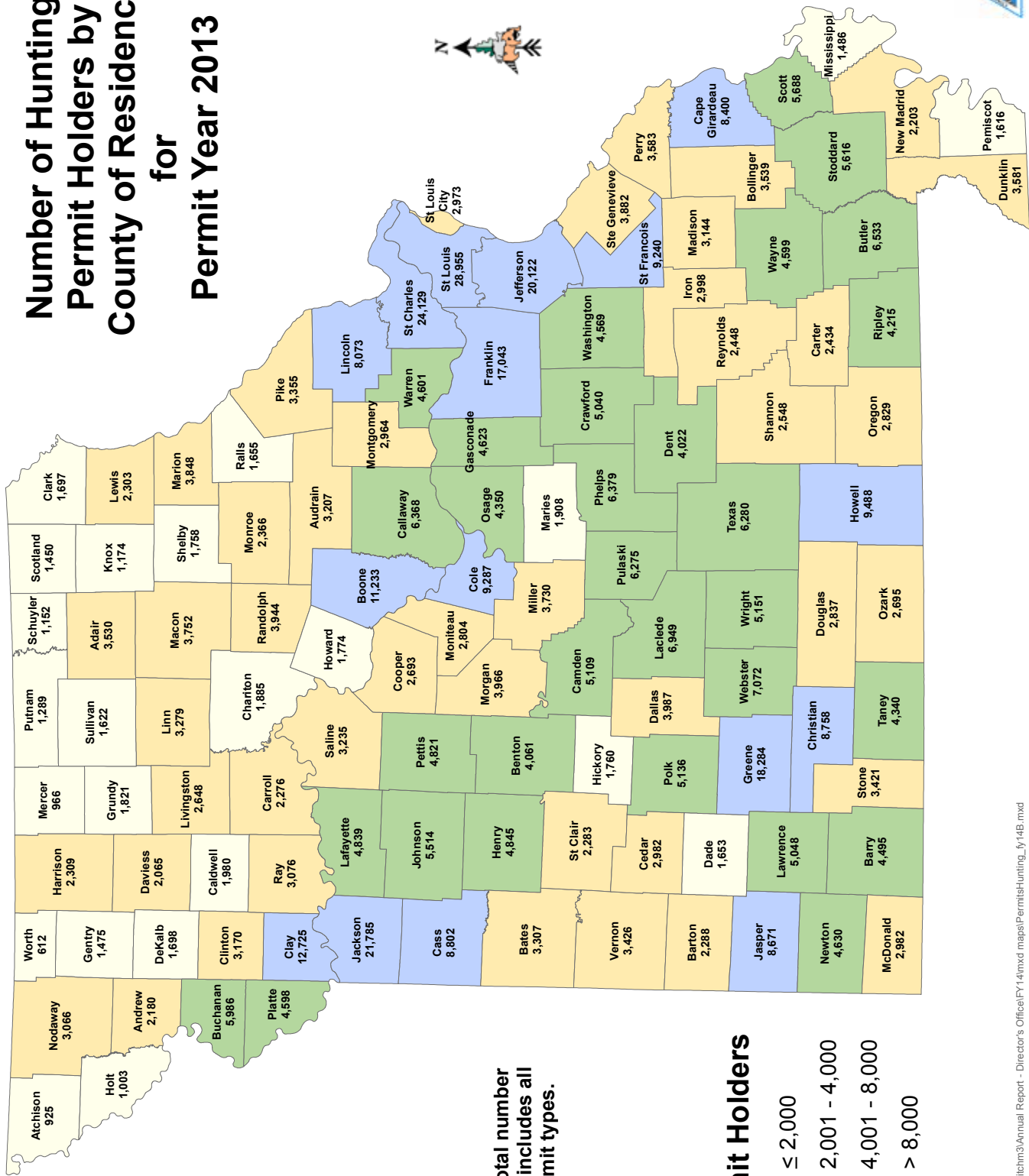
September 2014 | N:\Mltchm3\Annual Report - Director's Office\FY14\mxd maps\PermitsSmGame\_fy14.mxd

# Number of Landowner Deer Permit Holders by County of Residence for Permit Year 2013



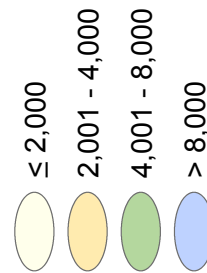
2013–2014 MDC Annual Report **95**

# Number of Hunting Permit Holders by County of Residence for Permit Year 2013



Note: The total number in a county includes all hunting permit types.

## Permit Holders





Ensure healthy and sustainable forest, fish, and wildlife resources

Manage public lands to benefit citizens and forest, fish, and wildlife



Engage partners to enhance natural resources and effective delivery of services

Ensure sound financial accountability and transparency

Provide opportunities for citizen involvement in services and conservation education